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The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

The Story of the World Today for the Men and Women of Tomorrow

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A WONDERFUL SCENE IN THE ALPS

THREE FEARFUL HOURS

WOMAN'S TERRIBLE ORDEAL IN THE ALPS

The Guide at the End of a Rope in Space

A WONDERFUL STORY

One of the most remarkable stories of the mountains that has ever been told has been sent home by the Times correspondent at Geneva.

It is the story of how an Alpine guide who had fallen over a precipice was saved from death after a splendid act of chivalry and heroism which seemed to render his destruction certain.

A woman climber, Mrs. Coninx, accompanied by a well-known guide named Bischof, set out to climb the southern side of the White Monk peak of the Bernese Alps, 13,465 feet high; and they had made some progress when the guide fell into a crevasse.

A Great Resolve

Mrs. Coninx, without a moment's hesitation, threw herself on the snow and was able to avoid being pulled after the guide, who was hanging in the crevasse at the end of the rope, without any other support. The woman, however, could do nothing more than remain still, with her feet dug into the snow. She was quite unable to pull the guide up.

In this position they remained for some time, and at last the guide, realising that the woman could not hold out much longer, but must be pulled over the edge, decided to sacrifice his life that she might be saved. He called out to Mrs. Coninx to cut the rope.

Was ever a more terrible ordeal for a human being? Mrs. Coninx refused.

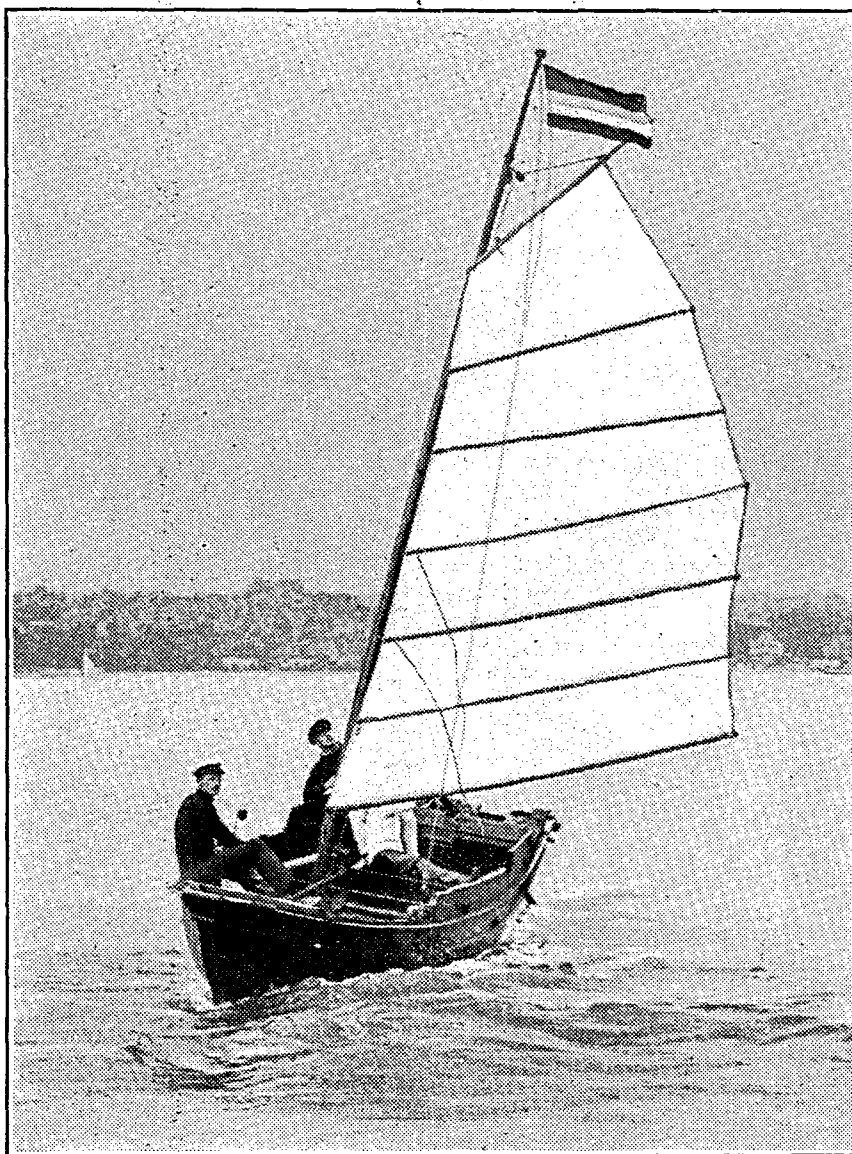
An Incredible Thing Happens

For a long time she held out, but at last, on the repeated demand of the hanging guide, and realising that in any case she could do nothing more to save him and that both must be killed if she persisted, she severed the rope. It was an appalling moment, for she expected to hear the guide fall to his doom. But no sound came, and, to her amazement, Mrs. Coninx found that an incredible thing had happened. *The guide had not fallen.* He himself was no less astonished than Mrs. Coninx, and it was some moments before they could grasp what had happened.

While he hung swaying over the edge of the crevasse, the friction of the rope had eaten into the ice, which had closed in and frozen round the rope again, so that while the man remained still it held tightly enough to support him.

For three hours the gallant Bischof remained in this terrible position, scarcely daring to breathe lest the rope should give way and hurl him to destruction. Mrs. Coninx hurried away for help, and at last a rescue party arrived in time to pull the guide up to safety.

A Strange Craft Comes Up the Thames



This strange craft has been seen sailing in the mouth of the Thames off Southend, where it attracted much attention. Its owner brought it from Hong Kong, and the Chinese Republican flag is floating at the masthead

These terrible chasms in the ice are the chief peril of mountain climbers, and many a thrilling adventure, and many a tragedy, has occurred by a slip like Bischof's. A similar accident happened on the Jungfrau in July, 1886, when Herr F. Burckhardt, accompanied by two guides, Teutschmann and Jossi, were climbing up the Guggi Glacier.

Suddenly an enormous mass of ice broke off and came rushing down the mountain-side. The men were struck by smaller fragments, and Jossi, who was leading, fell into a huge crevasse. Herr Burckhardt followed, but managed to grip the edge, while the lives of all the party depended on Teutschmann, who was able to dig his feet and axe into the ice and snow and support the others. He could do no more, however, and there they remained. Though one cut of Burckhardt's knife would have saved the other two by sacrificing Jossi, no such idea was entertained, and all resolved to die together.

Fortunately, when the strength of the three had almost gone, help came and they were drawn up to safety.

Earlier still, in 1862, there was an exciting crevasse adventure on the Aletsch Glacier. A party consisting of a Mr. Longman, with his son, aged 15, two friends, two guides, and a porter set off for an excursion on the glacier.

The boy was under the charge of a guide, and when crevasses had to be passed the guide held one end of a handkerchief while the boy grasped the other end, as the party was not roped.

Mr. Longman had just stepped over a crevasse when he heard a cry, and, looking round, found that his son was missing. The boy had fallen down a crevasse.

At once a guide was let down by a rope, and after a time he shouted to be drawn up, as he had hold of the boy. But what was the dismay of those above when the guide appeared over the edge of the crevasse alone. He had been holding the boy by the coat collar, but his hand was cold, his grip weakened, and the boy slipped out of his grasp.

After recovering, he descended once more, and this time fixed the rope to the boy's belt, and Mr. Longman had the joy of seeing his son recovered unhurt.

A NATION HELD AT BAY

STRONGHOLD CAPTURED BY PRISONERS

Dramatic Story of a Mediterranean Island

WHAT WILL SPAIN DO?

A little island in the Western Mediterranean named Alhucemas, off Cape Babazor in Morocco, nearly opposite Malaga in Spain, fortified by the Spaniards as a stronghold and a prison, is now in open revolt against Spain, and the Spanish military and naval authorities suggest that it should be left alone, for the present at any rate.

For years Spain has been using this inaccessible island as a place of detention for captured Moroccan rebels who have resisted the occupation by Spain of the North African mountain land southward and westward of Melilla.

The prisoners have now seized the island, and are ready to use the guns the Spaniards mounted on the island when they were in full possession against the Spaniards themselves.

As the conquest of the island is a tremendous problem, owing to difficulties of access and landing, the Spanish commander-in-chief wants 20,000 more men and a million and a half of money to make success sure; and that is a drain on Spanish manhood and money which the Government will not or cannot extort in these times. War costs, too, have a knack of far exceeding estimates.

The troubles with which Spain is beset have never been more curiously displayed than in this loss of a little island they have used for purposes of government in the past. Their very prisoners are now checkmating them as their masters, and the national credit sinks lower and lower on the whole North African coast.

PROBLEM OF A WHALE

What to do with dead whales is a curious problem which rarely confronts people in the south of the British Isles, but frequently it troubles the inhabitants of the north coast of Scotland.

The most recent case comes from the Orkney Islands, where great consternation was caused not long ago by a dead whale stranded on the shore.

After the valuable whalebone has been taken from its mouth the monster must either be towed well out to sea, or, if this is not possible, must be cut up and buried, a stupendous and highly unpleasant task which finds few volunteers, in spite of the good pay offered.

It is usual to give the first finder of the whale a share of the profit made on the whalebone, and this is called salvage, as if it were the sunken treasure of a ship. Any other money that may be over after expenses are paid goes to the Board of Trade, under whose jurisdiction all dead whales come.

GOVERNMENT'S WORLD POLICY TO SAVE EUROPE FROM RUIN

How Can Germany be Made
To Pay?

THE FRENCH WAY AND THE BRITISH WAY

By Our Political Correspondent

The British Government has declared its foreign policy to the world and issued a grave series of documents which show how necessary it is, in its opinion, that something should be done quickly if Europe is to be saved from utter ruin.

The British and French Governments agree firmly, as they have always done, that Germany must be made to pay; but the British Government believes that the French Government's policy will prevent the possibility of any recovery from Germany for her crimes against the world.

Germany Must Pay

The British Government repeats its determination that Germany shall pay as much as she can toward making good the terrible damage she inflicted on the world. How much that possible payment is the British Government thinks should be settled by an impartial inquiry, in which the United States and neutral Powers might join. To insist, as the Allies have been doing for so long, on an amount that would ruin Germany would not be profitable, as a ruined debtor can pay nothing.

The British Government suggests that the occupation of the Ruhr Valley by France and Belgium is not sanctioned by the Treaty of Versailles, and that its legal aspect should be submitted to the International Court of Justice.

Britain's Debtors

The Government also declares that it must call upon its Allies to pay back at least part of the enormous sums of money owing by them to Britain, the amount to be repaid being not less than the sum Britain has to pay America. These debts were incurred for our Allies on the security of Britain, and Britain, more heavily taxed than any other country, cannot afford to surrender her right to these vast sums.

The British Government thinks the occupation of the Ruhr has failed to produce reparations from Germany, and will continue to fail; and therefore it feels that the French action is preventing payment due to all the Allies.

Generous Treatment for the Allies

To settle the reparation question the Government is willing to deal generously with the debts owing to Britain by the Allies, but it cannot agree to other countries revising the order of payments in favour of themselves and to the disadvantage of Great Britain. The demands now being suggested as suitable for France are "between three and four times larger than would fall to her share under the existing agreements."

On these and other accompanying questions there is obvious disagreement between the Governments of the two countries, and it is not easy to see how such direct contradictions of view can be accommodated to each other. Indeed the British Government foresees, with great regret, the possible necessity of taking separate action in order to hasten a settlement which cannot be

HOW A PLANT GROWS INSTRUMENT WHICH WRITES IT ALL DOWN Latest Achievement of an Indian Botanist

MAP OF A PLANT'S CHANGES

Professor Bose, the Indian botanist, is well known to readers of the C.N. in connection with his interesting experiments on plant life.

A remarkable discovery has been made by him recently through the use of an ingenious instrument he has invented, which shows the rate of a plant's growth by drawing an ink-line on a piece of paper wrapped round a revolving drum.

When the plant jogs along its life in the ordinary way the instrument draws a more or less straight line, showing an uneventful, uninterrupted life story; the growth changes from day to night, because, as we know, sunlight is trapped by the plant cells, and made to help in their assimilation of food taken in from the moist air.

Impurities in the Air

By being able to watch the rate of oxygen production of the plant, which takes place at the same rate as the absorption of the carbon dioxide and water vapour from the air, Professor Bose has found that very tiny traces of impurities in the air affect the plant enormously, changing its power of "light-digestion" two or three times. Nitric acid present in the air to the extent of only one part in 2000 millions actually doubles the rate at which the plant can take in food from the air.

Only recently we read how another professor has succeeded in copying in the laboratory the process carried on by plants of turning water and carbon dioxide into food through the agency of direct sunshine.

Doubling a Plant's Oxygen

The first product formed in this wonderful process is what is called formaldehyde; and Professor Bose has found that one part of this in a thousand millions nearly doubles the plant's production of oxygen.

The new instrument will map out the life story of the plant's growth like the recording instruments which set out the consumption of gas or the changes of the barometer; but it deals with quantities almost infinitely little.

It shows very effectively once more that our study of the great things of Nature depends on the measurement of quantities and forces which a hundred years ago would have been far too small for man to discover.

Continued from the previous column

much longer delayed without the gravest consequences to the recovery of trade and the peace of the world.

Meantime the German Government has resigned, and Dr. Cuno has been succeeded in the Chancellorship by Dr. Stresemann, the leader of the Industrialists in the German Parliament. Germany, seen from any point of view, is a quaking bog which affords no firm foundation for confidence. Rarely has the outlook in Europe seemed darker or the forecast been more uncertain, but in public affairs it is usually not the anticipated danger that arrives; and we may sincerely hope that the darkest hour of night will prove once more to be nearest to the day.

WHERE THE NUTS COME FROM Rapid Growth of Brazil SECOND PIG COUNTRY IN THE WORLD

South America has made rapid progress in the last twenty-five years, and but for the war, which injured even those parts of the world remote from its scenes of death, the prosperity of the South American States would now be very great indeed.

Recent reports from Brazil show that that great country, with an area of 3,300,000 square miles, which is 27 times bigger than the United Kingdom, has now a population of over 31 millions, so that she is one of the biggest countries in population as well as in area. In 1910 the population was only 23 millions.

Brazil exports huge quantities of cotton, coffee, sugar, tobacco, vegetable oils, fruit, cocoa, hides, skins, rubber, and meat. There is also a big export of tapioca. Her factories and workers are rapidly increasing. There are now 19,000 Brazilian factories employing 350,000 workmen.

Brazil is the second country in the world in the ownership of pigs, fifth in oxen and horses, and tenth in sheep. She has now 29 million head of oxen.

It is curious to think that when we are grown up to be men and women Brazil will then have become an exceedingly rich and powerful country, containing more people than Great Britain. Huge parts of Brazil have still to be won for civilisation, and there is no doubt it will be done.

A LIFE SAVER

Precious Machine for Mankind

Two French engineers have invented an interesting machine for applying artificial respiration.

There are many instances in factory work where a life can be saved by making the body breathe mechanically until the lungs work naturally again, but this artificial respiration has to be done by continually moving the arms, and may have to be kept up for quite a long time.

With the new apparatus the patient is laid on a sort of mechanical apron, operated by a handle. This handle is worked up and down, and with very little effort the patient is brought alternately into the two positions which cause breathing to begin again. A further advantage is that oxygen can be given at the same time. The apparatus is quite portable, and can be put into instant use.

NATURE'S PARTNER

New Way of Growing Trees

In order to ensure that the roots will grow straight trees grown from seeds are now being put first of all into upright tubes, about five inches wide and two feet long, made of strong paper reinforced with laths and filled with soil.

The roots are thus unable to grow crooked or distorted. When the time comes to transplant the seedlings they are put just as they are into the ground, when the paper and laths rot away, and, in so doing, continue to serve the young trees by enriching the soil.

EVERYBODY'S BABY

Why 25 Firms Made a Piano

Twenty-five members of the Piano Club of New York, all of whom are piano manufacturers, wished to present a piano made by their own firms to the club. In order to avoid dissension it was finally decided that all the manufacturers should combine in the making of one grand piano, each contributing a share of the materials and workmanship.

The finished piano has just been installed in the club, and is the embodiment of all that is best in each of the 25 firms. The instrument has been nicknamed Everybody's Baby.

NEWS ABOUT FLIES How Many Eggs Do They Lay?

A QUEER ILLNESS

By Our South Kensington Correspondent

Though for the last quarter of a century the common house fly has been studied by a great number of investigators, there still remain a few points to be cleared up.

It may come as a surprise to many of us to learn that only recently have definite investigations been made into the full egg-laying capacity of individual flies and the period elapsing between the laying of each batch.

Hitherto it was thought that about 600 eggs represented the full capacity of one fly, and that this number was laid in five or six batches at intervals of two or three days. But Mr. L. H. Dunn, working in the Panama Canal zone with 40 female flies, obtained a total of nearly 42,000 eggs in 34 days.

This appalling number, however, was by no means equally contributed to by each fly, for one laid only 39 eggs in a batch and then died, whereas another laid as many as 2500 in 21 batches during the 34 days.

Skin that Suddenly Hardens

Unfortunately, Mr. Dunn had to leave his work before being able to breed the maggots through. But it is certain that the whole number would never have bred through to flies, for, though they would have been free from the attacks of natural enemies, there is a curious malady that affects house flies, and others closely related to them, during their pupal period.

When the full-grown maggot is ready to pupate it contracts, and its skin suddenly and rapidly hardens. Then inside this case the body fluid and some of the organs of the maggot begin to break up into minute active cells, which start to build up into the fly pupa.

In this unexplained malady, however, it appears that when the cells have broken up something goes wrong. The cells die and shrivel up.

Notable Things Just Said

A writer in the Morning Post, on the anniversary of the Fourth of August:

With that Bank Holiday went the old world to the grave. The railway stations were blocked with the holiday luggage of people who would not see that at every moment the Shadow drew nearer and nearer, overspreading and darkening the sky. Well, it is nine years ago. Only nine years? It seems already another age. Only one thing remains as an abiding link between Then and Now.

The memory of what has been
And never more shall be.

Dr. L. P. Jacks, the famous Principal of Manchester College, Oxford:

A little science turned into beauty is worth more to mankind than a lot of science turned into money.

Mr. Edison, the famous inventor, on Mr. Ford, the famous manufacturer:

The common people like Mr. Ford because he has not become so over-civilised as to be an artificial person.

Sir Henry Newbolt, speaking of a visit he has lately made to Canada:

The Dominion is probably the happiest country in the world today.

Mr. Gordon Selfridge, talking to teachers in London:

Imagination is like the tornado blowing through the forest. It clears a path through which Judgment can take its way calmly. Imagination and Judgment are responsible for the great accomplishments of this world.

LONDON STREETS ALMOST IMPASSABLE

URGENT NEED FOR TRAFFIC CONTROL

The Increasing Waste of Time
and Money

WHAT SHOULD BE DONE

By a London Correspondent

The streets of London are becoming impassable. Every month sees an increase in the number of vehicles on the roads, and the waste of time for millions is so serious that it is not an exaggeration to say that each day witnesses the waste of many years of time.

If we only take the four million people of County Council London, the daily waste of their time through crowded streets amounts to a tremendous figure. Suppose only one million of them travel, and each one of the million loses half an hour in the day—that means losing over fifty years of time in a day!

Millions Lost Every Year

What it means in money has been variously estimated, but it must amount to millions of pounds a year.

One of the latest troubles is the invasion of the London streets by a number of new bus companies and new buses of old companies. For long the General Omnibus Company alone ran motor-buses in London, but during recent months a dozen or more new motor-bus lines have appeared in the busy parts.

Between motor-buses, taxis, cycles, pedal bicycles, travellers' vehicles, drays, motor-lorries, horse carts and wagons, heavy vehicles, tradesmen's motors and carts, and so on, the London streets have become a pack with which the police and pedestrians vainly struggle.

And more than time and money are wasted. Hundreds of lives are lost and thousands of people become cripples every year, so that the matter is no light one, and calls urgently for action.

Things that Matter

The things which need to be done are plain enough. Here is a list of the reforms which are needed to make London easy and safe to travel in.

1. General control by a Traffic Board, composed of representatives appointed by the governing bodies of London.
2. The control to cover a considerable area, so that the approaches of traffic to London should be safeguarded. The area of control should extend over a radius of 15 to 25 miles from the centre.
3. The formation of new roads and the widening of existing roads.
4. The formation of new bridges over the Thames to make proper connections between north and south.
5. The division of traffic into classes and its diversion into suitable tracks, so that passenger traffic should not be held up by, for example, a load of timber being sent through a busy district.
6. The careful regulation and licensing of passenger vehicles of all sorts, especially of motor-omnibuses and taxis.
7. Strict control of the dimensions and stopping places of all passenger vehicles.
8. The restriction of the number of buses on a route to the number needed.

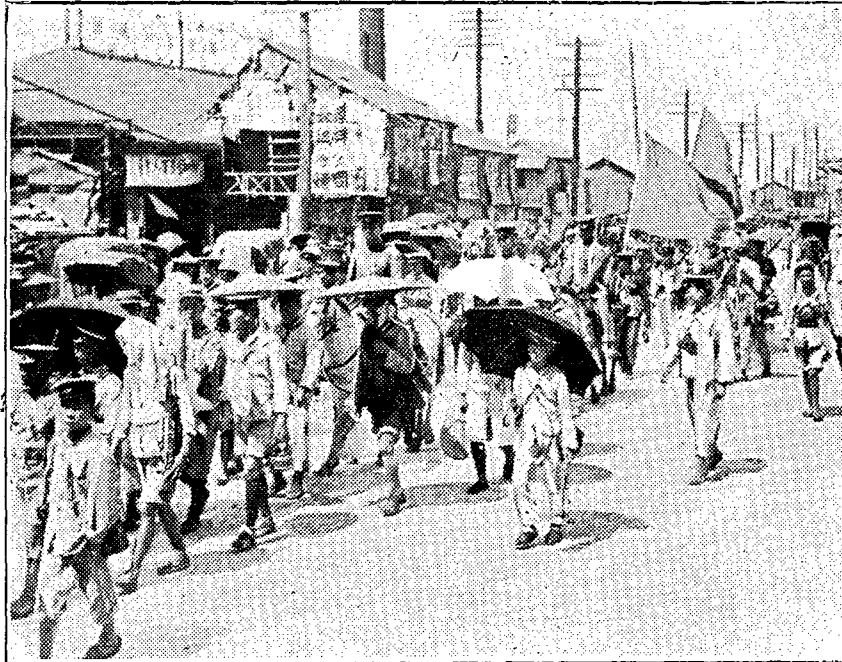
Lower Motor-Buses

We hope that such a Traffic Board as is here suggested will soon be set up, and that among other things it will strictly control, not only the number and routes, but the height, width, length, and weight of motor-buses. They should, of course, have properly appointed stopping places, marked by clear signs.

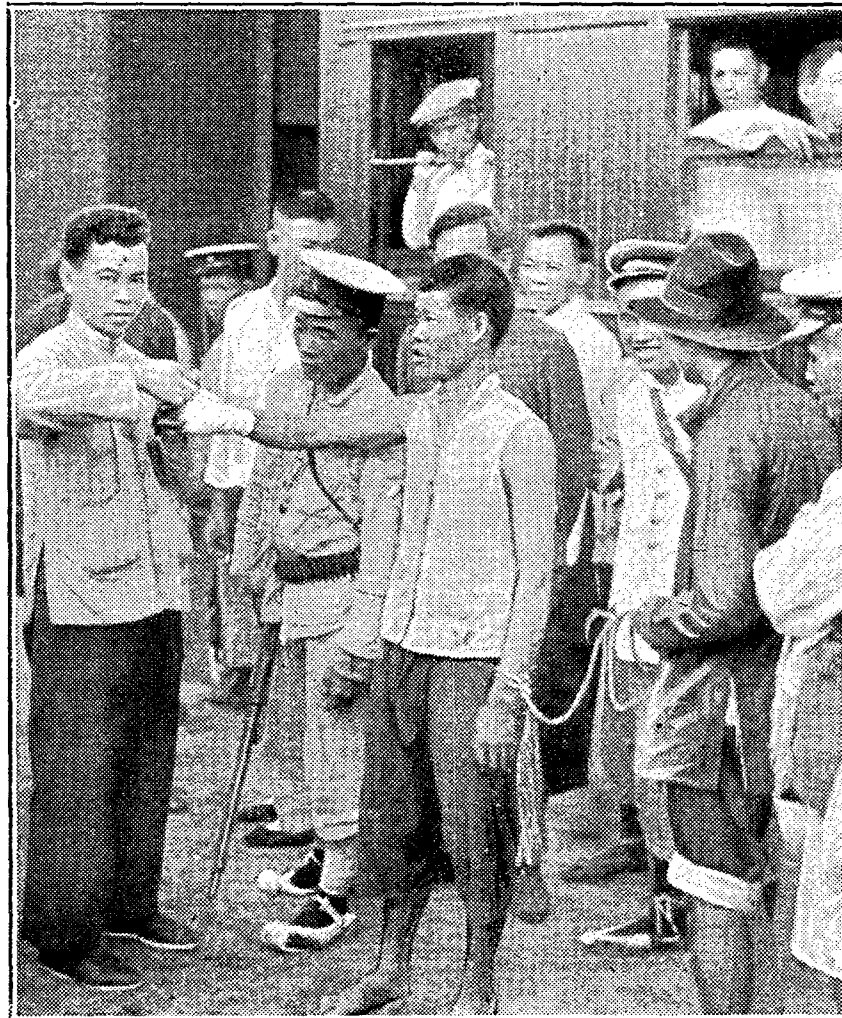
The General Omnibus Company has introduced a new omnibus a foot and a half lower than those of the old type, and this is a very great improvement. The whole of the bus is lowered, and with it, of course, the centre of gravity of the vehicle, so that it becomes less likely to turn over.

Unless serious reforms of the kind suggested are taken in hand the state of London streets when trade improves will soon be a disgrace to our civilisation.

ROUNDING-UP THE BRIGANDS



The army sets out to capture the brigands, many soldiers carrying umbrellas



Wounded prisoners receiving attention from army surgeons



Women water coolies of the army



Brigand prisoners at their meal

China is now infested with brigand bands, and business everywhere is being held up by their depredations. Dr. Sun Yat Sen's army recently went out on a brigand hunt and captured many of the bandits, and these photographs were taken during the great round-up

GREAT TOM'S TOWER BELL WHICH STRIKES 101

Sir Christopher Wren's Interesting Letter About It

ARCHITECT AND ASTRONOMER

Not many people know that Sir Christopher Wren, besides being the greatest architect of his day, was also the greatest astronomer. Of course he was overshadowed by Sir Isaac Newton, but Newton was a mathematician and not an astronomer.

In 1661 Wren was appointed Professor of Astronomy in the University of Oxford, and it is 250 years ago this year that he gave up that post to devote himself entirely to architecture.

It was Sir Christopher Wren who designed and built the famous Tom Tower over the gateway of Christ Church, the most splendid of all the Oxford colleges. The tower was intended as a home for the bell known as Great Tom, which was first rung in the tower on May 29, 1684, and from that time to this has rung 101 strokes every night except one, at nine o'clock, as a signal that all students are to be within their college walls. The number 101 is the number of students who were at Christ Church at that time. Needless to say, the ringing of the bell is now a mere custom, and the students do not return to college at the early hour of nine.

Wren Answers the Bishop

But the most interesting fact in connection with the building of the Tom Tower is that disclosed in a letter of Wren's to the Bishop of Oxford, which has been lately found. The bishop was Dr. Fell, the subject of the well-known lines:

I do not like thee, Dr. Fell;
The reason why I cannot tell,
But only this I know full well,
I do not like thee, Dr. Fell.

This letter is in reply to a proposal of the bishop that Wren should convert the tower, then being built, into an observatory. Wren was against the proposal, but he was very polite in giving the bishop reasons why the tower should be allowed to remain a bell tower. To make it an observatory, he said, would involve a change in design; the bell would have to be lowered and might not be heard well; and the Gothic roof, in keeping with the rest of the college buildings, would have to be abandoned and a flat roof, with a balustrade, substituted.

He then went on to point out that for astronomical observation what is wanted is not so much a fine building as suitable instruments. "We built, indeed, an observatory at Greenwich," he writes, "not unlike what your tower will prove; it was for the observers' habitation and a little for pomp; it is the instruments in the court after the manner I have described which are used; the room keeps the clocks and the instruments that are laid by."

This settled the matter, and the Tom Tower remained a bell tower.

DEAD FISHES IN A DEAD VOLCANO

Mystery of an Italian Lake

Italian anglers getting ready to spread their nets on Lake Bracciano were amazed the other day to see the surface of the water covered with dead fishes.

At first they believed it to be the work of poachers, who often start explosions under rocks where fishes are known to shelter; but some of the fishes were sent to Rome for experts to study the case. The experts came to the conclusion that the fishes had been killed by an electric shock, and this suggestion is supported by the fact that Lake Bracciano lies in the crater of a dead volcano

THE BATTLE OF THE BARNACLES

HOW TO BEAT THEM
Can They be Electrified Into the Sea?

A TALE ABOUT DARWIN

By Our Natural Historian

How the barnacles, dependent upon other floating bodies for their travels about the world, pop in and out of our great human story!

Not long ago we were telling of elaborate experiments on their colour sense, and of a determination to paint the hulls of ships white because barnacles do not like that colour and seem to avoid it.

Not long ago, also, an electrician evolved a great battery for the purpose of electrifying steel ships, and so shocking the barnacles back into the sea. That seems an idea which may some day prove of importance to ship-owners whose vessels frequent tropical waters, where the little barques of early maritime adventures used to sink without trace during their voyages, riddled through by the terrible teredo.

The Entry in Darwin's Diary

Any student of the proceedings of the Royal Society will remember with a smile with what immense gravity our fathers of learning, contemporaries of Newton and Cavendish and other giants, worked out to their own satisfaction the life history of the barnacle goose, and declared that it arose from a barnacle.

But it is Darwin whom the new barnacle discovery would chiefly have delighted, for he gave eight laborious years to the study of these little animals, and proceeded from them to the unfolding of his theory of Evolution.

There is a rueful little laugh running through his diary describing these terrific small labours. "I worked steadily on the subject for eight years," he says, "and ultimately published two thick volumes describing all the known living species, and two thin quartos on the extinct species."

A Famous Book

Those studies brought our philosopher into fiction. Bulwer Lytton bursqued him as "Professor Long, who had written two huge volumes on limpets."

But if that work had not been done by Darwin we should never have had his famous book on the Origin of Species. "I doubt whether the work was worth so much time," he said; but he added that the study he had given to the subject was of immense help to him when he had to discuss in his masterpiece the principles of a natural classification of species.

Barnacles stuck to Darwin as they stick to our ships; they brought on an attack of nervous illness and drove him to Malvern for a "cure."

Darwin and the Doctor

There he was ordered to abstain from all work and study, but one day his doctor found him at a desk surrounded by books and labouring furiously with his pen. The doctor ordered him to go for a long walk.

"Impossible, Doctor, impossible," pleaded Darwin. "I am engaged on a subject of paramount importance and must not be disturbed."

"And pray, Mr. Darwin, what is the subject?" asked the medical attendant. "The muscular movement of barnacles," he replied. "Greatly neglected, greatly neglected."

Archimedes with his mathematical problems in the sand as the soldiers slew him, Darwin with his barnacles when death was snatching at him, Mozart playing imaginary instruments for the piece he died in composing—what pictures they are!

E. A. B.

THE GREAT WAR'S RUBBISH HEAP

BREAKING UP THE FRAGMENTS

How Mountains of Deadly Stuff are Dealt With

THE VAST WEALTH FLUNG AWAY

If only people could feel the reality of the waste caused by war they would loathe it with a tenfold hatred.

The waste of human life, health, and happiness defies comprehension, it is so vast and vague and secret. But we may perhaps approach some idea of the material waste—the loss of wealth through the destruction of costly things on which human labour has been expended, and which have to be paid for by all of us.

One of these instances of material waste has been made plain in a lecture delivered in London by Mr. F. N. Pickett, who has been engaged for three years in France and Belgium breaking up the ammunition dumps left by all the armies when the war ended.

Recovering the Chemicals

Mr. Pickett is naturally proud of the fact that in superintending the cleaning up of the dumps he has been enabled to save 350,000 tons of material for some kind of after use. But what the world ought to know, though it never will know it, is what the original cost of the things broken up was, and what is the value of the fragments of material rescued after the expense of dealing with them has been paid.

We are told that 5000 workmen broke up each month 20,000 tons of ammunition, consisting of 1,000,000 shells, 500,000 bombs, and 750,000 fuses.

The fuses had to be extracted from the shells, the explosive contents washed away, and then the hard material crunched up by machinery so that it could again be used for steel-making.

Some of the chemicals used in making poisonous gases were recovered and had a market value. Amatol was used as a fertiliser. Thousands of tons of cordite were burned. There were small mountains of tin cartridge cases and millions of wooden ammunition boxes. The zinc lining of cordite carriers was removed, and the cases are being sold for flour and corn bins. Parts of old machinery were sent to England to be made into bicycles, bedsteads, and agricultural implements, and large quantities of aluminium, copper, brass, zinc, lead, tin, steel, and iron were recovered.

Why the World is Poor

But the cost of clearing was very heavy, and the gross loss must have been staggering in amount. Yet this is only one type of war waste. The stores of food and reserve clothes would, of course, come finally into practical use, though at an enormous loss to the country as a whole—on the cost price compared with the selling price. Then there were the dispersed camps; at home as well as abroad, with the cost of dismantling them, disposing of them at any price, and restoring former conditions, as well as paying for damages.

Is there any wonder that the world is poor and that trade is unsettled after this orgy of waste? War cannot but lead to the flinging away of money with both hands, as recklessly as it flings away life.

In the Auction Rooms

The following prices have lately been paid in the auction rooms for objects of interest.

Portrait by Gainsborough	£1000
Kneller's portrait of Queen Anne	£150
A 16th-century pamphlet	£88
Queen Anne bureau bookcase	£84
Scott's Waverley, 1st edition	£52
Boswell's Life of Johnson, 1st ed.	£20
Alice in Wonderland, 1st edition	£8

The first book printed in Italy, illustrated with woodcuts and dated 1472, realised £350

SURPRISE FOR A CITY

What the Wind Brought to Toulouse

POLLEN CARRIED 200 MILES

By Our Paris Correspondent

Citizens of Toulouse who started to their business early in the morning the other day were amazed to discover that their streets had suddenly been coloured a kind of sulphurous yellow.

Had that dusty yellow only been spread here and there it might have come from the waste of factories or from passing vehicles; but it extended all over the streets, so that nobody doubted it had fallen from above. Indeed, a few who had gone out at four in the morning declared that they had actually seen a rain of yellow powder.

Specialists hastened to gather handfuls of the puzzling substance and to examine it with the microscope. Then they found that this supposed rain of sulphur was simply pine-tree pollen.

These almost imperceptible seeds are made of two close, tiny balloons, or air bags, and, thanks to this natural device, the pollen of pine trees, which is extremely light, can be carried by the wind over great distances.

The abundant fall of pollen in Toulouse and all around to a distance of perhaps fifteen miles had come from the pine forests of the western coast, two hundred miles away! In that region pollen showers are so frequent that nobody thinks anything about them; but who would have thought the showers would reach Toulouse, so far away?

RADIUM MUCH CHEAPER

Only £15,000 a Grain

Since the beginning of the year the price of radium has fallen from over £21,000 a grain to £15,000.

This remarkable reduction is due to the development and treatment of the ore resources in the Belgian Congo, where rich deposits were discovered at Katanga, as the C.N. noted in January.

A specimen of this ore, weighing over half a ton and representing 100 milligrams of pure radium, was exhibited at the International Mining Exhibition held in London. Monsieur Sengier, who lectured at the exhibition on the mineral resources of the Belgian Congo, said that the known stock of radium in the world amounted to 200 grams, and that the Congo could produce 25 grams a year for the next ten years if its demand by the medical world warranted such an output.

The ore is not treated on the Congo, but hundreds of tons are shipped every month to Antwerp; and from this ore radium is recovered in the form of radium bromide.

Half an ordinary lump of sugar would represent the amount of bromide recovered in a month, but such a tiny quantity is enough at present to supply the demands of the whole world.

THE BABY BORN AT SEA

How It Will Grow Up

A baby was born the other day to Polish parents on board a ship on the voyage to New York.

The authorities declared that as the ship was British so was the baby; it did not matter what country the parents had come from.

They said, also, that all the British people who could be allowed to come into America that month had already been admitted. Therefore the Polish mother might land, but the British baby could not. Such was the law, and they could not help it. But Mr. Curran, the Commissioner of Immigration in New York, was inclined to agree with Mr. Bumble that "the law is a ass," and he let the baby in. The child will be, not a Briton, nor a Pole, but an American.

WAGNER'S WIDOW IS STARVING

A MISERABLE STORY

Tragic Chapter in the History of Music

THE DOOM THAT COMES WITH WAR

When we remember that Richard Wagner was born 110 years ago it seems unlikely that anyone nearly his own age should still survive him. But his widow, the famous Cosima Wagner, remains, a melancholy witness of the mutability of human fortune.

She links two great lines of music, for, now nearly 86 years old, she was the youngest daughter of that astonishing genius the Abbé Liszt; and in 1870, when Wagner was 57, she became his second wife, his stern, unbending guardian angel, disciple and dictatrix, worshipper and autocrat.

Now, bent with age, infirmity, and sorrow, this woman who has moved upon terms of equality with kings and queens is starving, and we have had a concert in London to provide her with the bare necessities of life.

Wagner and the Mad King

The last daughter of Liszt, proud and unbowed, has been hungering in a mansion in Bayreuth; the last pupil of Liszt, a world-famous opera singer, starves in Vienna on a once ample pension, which the falling exchange has reduced to fivepence a month.

Cosima Wagner came into the life of her husband when his troubles were over. He had pined for bread and comfort as he had pined for fame and recognition; he had been an exile from his native Germany because his politics were too liberal for the time. He had beaten in vain at the doors of renown, and had been turned away in anger and sorrow with his operas unheard, or heard with derision, or at best with chilly tolerance.

But a mad king, Ludwig of Bavaria, sane where appreciation of great music was concerned, called him to Bayreuth and made his fortune secure. Then it was that Wagner married the woman who has now outlived him just 40 years.

The World Flocks to Bayreuth

Ludwig built a theatre for him at Bayreuth, and there the great operas were performed year after year. All musical Europe flocked to the little Bavarian city to render homage at the composer's shrine. Wealth in money, wealth in happiness, were Wagner's; and Cosima, when death took him from her, inherited it.

Year by year the Wagner performances continued in Bayreuth. She kept the copyright of many of his works. She sought to have them performed nowhere in the world but in the Wagner theatre where they were produced. She appealed to the German Government; she fought actions in the courts to prevent the world from hearing the masterpieces which had become the heritage of mankind.

A Tragedy of the War

The war came, and with it came disaster for Cosima Wagner. Her means vanished, and on her eightieth birthday she was so poor that she could not buy coal to light a fire in her house.

Notices were published in the newspapers warning friends that they must not call on her as she could not provide a fire—it was in the depth of winter—to welcome them.

Matters have not improved, with marks millions to the pound, and thus this proud woman finds herself in the grip of poverty, starving.

CHILDREN'S NEWSPAPER

AUGUST 25 1923

Why?

ONE of the noblest expressions of the soul of man tells us, in the language of olden time, that if we would be free we must for ever stand on guard:

The condition upon which God hath given liberty to man is eternal vigilance; which condition if he break servitude is at once the consequence of his crime and the punishment of his guilt.

These words should be learned by heart and constantly brought to mind, for they are necessary to our happiness as private individuals and as public citizens.

It is the will of God that the price of our freedom from sin and from the slavery of bad habits should be eternal vigilance.

Nor are we to complain about this price and to regard it as a hardship. It is one of the greatest of our blessings. To be vigilant means to be alert, vitally awake, well armed, swift to overthrow the enemy; it means the very opposite of apathy, torpor, and snoring self-satisfaction.

In the same way we must be alert as citizens, lest our freedom from tyranny be gradually filched away from us. We must not merely withstand the official of a Government who tries to bully us, but we must oppose any Government which tries to bully any other member of the community. The price of our own liberty is eternal vigilance concerning the liberty of the humblest of us all.

Because we take this view of liberty we gladly raise our voice with the voices of many other newspapers to protest with all our might against the threatened destruction of one of the loveliest villages in our countryside. We believe that if the War Office is allowed to have its will in spoiling Lulworth a far-reaching step will be taken to Prussianise the people of this country, for it means that a few officials can constitute themselves our masters, not our servants.

The war has left a Prussian spirit in our Government offices, and we are no longer regarded as a nation of free citizens growing as we will in knowledge and happiness; we are merely so many tools in the hands of officials, to exercise their will, to effect their purposes, and to be their cannon food whenever the politicians choose to make another war.

We must be on our guard, and we must be up and doing. It is for us to tell the authorities that they are there to execute the will of the people, and to keep our country beautiful and free. It is for us to make this plain beyond all question, and especially is it for us to say that the tranquil villages of our Little Treasure Island shall not be broken up without millions of Englishmen knowing why.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



Strength in Weakness

MACAULAY said of Charles the Second at the time of the Restoration that "he had to deal with a people whose noble weakness it has always been not to press too hardly on the vanquished, with a people the lowest and most brutal of whom cry *Shame* if they see a man struck when he is on the ground."

We are, let us hope, on the eve of our Restoration, and we should do well to think of these words, and to recall this fine spirit of our fathers when we are talking of the Restoration of Europe.

Greater Love Hath None

FEW people know that there is a leper colony in England.

It is established in Essex, and private steps are now being taken to make it a place of comfort for the poor victims of this terrible disease, most of them men who have served their country in the East.

One of the things we have just heard about this tragic colony seems to us worthy of being broadcasted all round the world.

Five women, wives of English lepers, have refused to leave their husbands. They have gone into that colony. They will never come out.

Why They are There

A PUBLIC man has been going round the English prisons, and everywhere he went he found boys of twenty locked up in cells.

They did not look like criminals. Nothing marked them as gaol-birds. Why were they there? For stealing money. Why had they stolen money? To pay their betting losses.

Think what it means. They are at the threshold of life, and they are stamped with the mark of the prison. Who will employ them? What can they do? And we speak of betting as something that will always go on!

Not in this spirit did Pasteur speak of hydrophobia, Jenner of smallpox, Wilberforce of slavery, and Lister of death from blood-poisoning.

Within Limits

THE M.P. who has been saying it is not necessary for everybody to have a good education is probably related to the gentleman who considers it unnecessary for every house to have a bathroom.

The one has been to Oxford, and the other has more bathrooms in his house than he can use.

We should never assume that because we do not appreciate our privileges others who have not got them would not appreciate them if they had. The cat who lived in a butcher's shop could not understand why any cat should die of starvation, but he was mistaking for wisdom what was only his lack of understanding.

Weeding It Out

WE wish we could print in block letters the name of the sham sportsman who shot the tame black swan Sammy, which made a park pond in Hull his home.

Sammy flew into the country for a little exercise, and the man with a gun promptly brought him low.

Killing lust is slowly weeded out of the human heart by love of Nature, but it is, oh, so slow.

Tip-Cat

MR. BALDWIN says that whether he succeeds or not he will run straight. But is not a Premier expected to move in the best circles?

MR. CHESTERTON thinks revolution is a bad habit. An absolutely revolting one.

It is said that Darwin always stopped his day's work at noon. The Darwin Theory will soon be doubling its followers.

A CORRESPONDENT says most of the people he meets are shadows. Nowadays there are not many men of substance.

THE outlook of youth is changed nowadays. And youth is getting a look-in.

ALL trades have their own points of etiquette. And often get stuck on them.

IT is no use advising the lady who wants to know what she should take on a picnic. Her choice is pretty sure to be hampered.

THE chaos in Europe is the fruit of our international policy. And it has gone bad.

AT a seaside carnival the mayor forbade people to wear false noses. Afraid they might be put on a false scent.

A HAMPSHIRE vicar thinks sermons are futile. No doubt he knows.

IF it is true that Germany is making marks by the million can we wonder the Germans have ceased to count?

The Prince Refuses

OUR congratulations to Prince George. He seems to have a full share of good human sense.

Though urged the other day by his companions to go through the silly farce of having his hand examined by a so-called palmist, the prince resisted their appeal.

Everybody who has a scrap of judgment knows that fortune-telling quackery is entirely unwholesome and largely illegal. It panders to human folly and superstition for the sake of gain, and to encourage it is worse than silliness. A number of evils follow in its train, and it is pleasing to think of our young prince as keeping outside of the thoughtless crowd.

A Great Man Sees a Little Thing

By La Petite Européenne

PROVENCE has just been celebrating the memories of Henri Fabre and Louis Pasteur, two friends whose names come together in the hearts of the French people of the South. One made his country famous by his researches into insect life; the other saved for France a great industry, the breeding of silkworms.

Pasteur, of course, did much more, but it was his interest in silkworms that brought him into touch with Fabre, and this is what Fabre relates in his diary about his first meeting with Pasteur. He writes that one day, when Pasteur was deep in his laboratory studies in Paris, the great chemist was summoned to leave his work at once and go to Provence to investigate the plague that was ruining the silkworm industry.

Pasteur's Surprise

At Avignon, in the centre of Provence, lived Fabre, and as soon as Pasteur arrived in the town he called to see the entomologist. "I wish to see some cocoons," the great chemist said. "Could you get me some?"

"Nothing easier," said Fabre. Pasteur took one up, turned it round and round between his fingers, and examined it as we should examine some queer thing sent from the other end of the world. Then he shook it and exclaimed, with much surprise:

"It rings! Is there anything in it?"

"Well, yes," said Fabre, astonished at the great simplicity of Pasteur.

"But what is there inside?"

"The chrysalis."

"What do you mean by chrysalis?" went on Pasteur.

"I mean the sort of mummy into which the caterpillar turns itself before it becomes a butterfly."

The Wonder of the Chrysalis

Pasteur was amazed. "Ah!" said he. "So there is one of those things in each cocoon, is there?"

"Yes, always; it is to preserve the chrysalis that caterpillars spin cocoons all round them," Fabre explained.

"Ah! Is it?" The great chemist had evidently seen light.

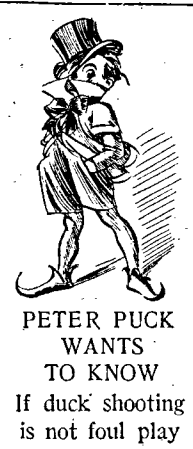
He said no more that day, but he slipped the cocoons into his pocket and went home to study at leisure this great new thing to him, this wonder known to every child—the chrysalis.

Truly amazed was Fabre, for Pasteur was ignorant of the very alphabet of this vast subject he was going to study. Cocoon, chrysalis, metamorphosis, were all mere words to him.

Yet he was to master his subject and find his secret, and in the end he was to get out of it all one of the greatest gifts of knowledge a man ever made to France. A rare example, surely, of simplicity and courage!

Let Your Trouble Be

Let your trouble be;
Light will follow dark.
Though the heaven falls
You may hear the lark. GOETHE



August 25, 1923

The Children's Newspaper

7

LITTLE TREASURE ISLAND

THE GLORY OF OUR COUNTRYSIDE

Saved from German Bombs but Threatened by British Tanks

THE WAR OFFICE AND LULWORTH

One of the stupidest things ever attempted by the War Office is arousing condemnation wherever it has become known. All the same, if we are not careful, that stupid thing will be done over our heads. Parliament is not sitting, and it is the opportunity of the bureaucrats.

There are two beautiful villages on the Dorset coast called Lulworth. One is East Lulworth, the other is West Lulworth. Between them lies a stretch of cliff, downs, and fields which has scarcely a match in the whole country for majestic loveliness. Travellers come many miles merely to look at it; scholars come year after year to spend their holidays in such exquisite peace and beauty; from all over the country geologists come to these cliffs to study a fossilised forest and to explore the history of evolution.

Sacred to Lovers of Literature

And, moreover, this little bay between the tall cliffs, known as Lulworth Cove, is sacred to all lovers of literature because it was there that Keats spent his last night in sight of England.

On these very rocks of Lulworth Keats himself spent what was, perhaps, the last happy day of his life. The story of it was told some years ago in the C.N. Monthly, My Magazine. Keats was on his way to Italy, and his ship was becalmed outside Lulworth. He landed with his friend Severn and spent a day among the rocks. It was one of those days that are like no other days, at the end of September in 1820, and the glory of this place seemed to lift up Keats so that he romped about like his old self.

Keats Writes His Last Poem

He knew these rocks, and showed his friend the grottoes and caverns with a pride in them as though they had been his own; and it is thought that that evening, when he went on board again, he wrote his last poem. He borrowed a Shakespeare that he had given his friend a day or two before, and wrote on the flyleaf a sonnet which he called *The Lover's Complaint*, beginning "Bright star, were I as steadfast as thou art." The ship took him safely to Italy, but he was ill and miserable, and there were no more happy days for Keats.

It is this little sacred piece of English soil, this bit of all the vast spaces it has at its command, that the War Office has decided to make the firing-exercise ground for tank guns. Another site, much more useful, and no farther away from the tank camp, has been offered to it, but the War Office says No.

Desecrating a Lovely Village

Somebody has decided that the lovely fields leading up to these cliffs, this green space of nearly a thousand acres, shall be swept by gunfire for six or seven hours a day, and that the cliffs themselves shall be shelled, and the whole countryside dotted with red flags warning people that Lulworth is not a place of rest and peace but a place of death.

One of the fishermen who lives at Lulworth complained the other day: "I fought for this bit o' land, and when I come oam they try to starve me out of it."

All the men who went from the Lulworths to the war fought for "this bit o' land;" it was all they knew of England, all they deeply loved of her, and they come home to find that it is not safe to fish in its waters or to walk in its fields. They broke the spirit of the tyrant and the Goth on foreign seas only to find when they come back a tyranny at their own doors.

We cannot believe that either the Prime Minister or Lord Derby approves of this wanton desecration of an English

NEWS FROM EVERYWHERE

An old hat blocked a sewer at Handforth, Cheshire, with the result that a large area of land was flooded.

Steamer Runs Into London Bridge

A Newcastle steamer going up the Thames struck London Bridge and remained fast for several hours.

Diamond Worth £10,000

A diamond of a rich golden colour weighing over twenty carats has been found at Wesselton, South Africa. It is worth about £10,000.

Swan Stops a Race

During a swimming race in the Thames at Chertsey a swan attacked the swimmers, and was so persistent that the race had to be abandoned.

Flying Record

In the aerial race round London the winner, Mr Larry Carter, flying a Gloster biplane, covered the course at over 192 miles per hour, which was a record speed for this race.

Australia proposes to send 300 of her Boy Scouts to London next year for the British Empire Exhibition.

His Hobby

"My favourite hobby is to help fellows who are down," President Harding used to say.

Wonderful Thunderstorm Escape

At Retford, in Nottinghamshire, a flash of lightning twisted the hairpins in a woman's hair, without hurting her.

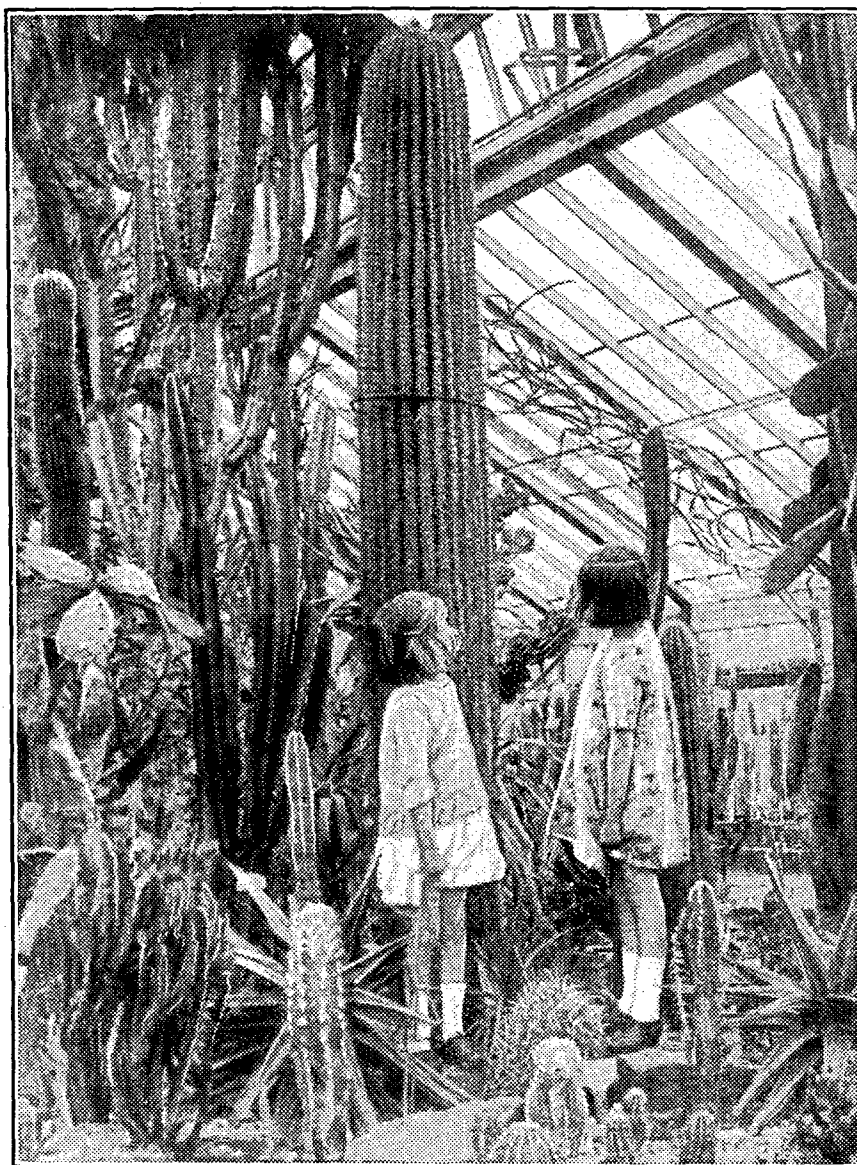
Porpoises at Westminster

A number of porpoises recently went up the Thames past the Houses of Parliament, and hundreds of people stood on Westminster Bridge and watched them at their gambols.

High Heels

While an actress was playing the part of Katharine in *The Taming of the Shrew* at the Comédie Française in Paris the high heels of her shoes caught in the carpet, and she fell over the footlights into the first row of the stalls.

HALF A TON OF PRICKLES



This giant cactus at Kew Gardens, which recently arrived from California, weighs over half a ton and is more than eleven feet high. It is said to be the largest cactus in England

Continued from the previous column

village which has become almost a place of pilgrimage. We cannot believe that any Government would perpetrate such an appalling blunder. We feel that it is the idea of somebody who constitutes himself an authority on tanks, and who does not care what the nation thinks.

That attitude will mean in this case the ruin of two villages, the destruction of much valuable pasture land, and the driving away of the trade of the fishermen. We have received a strong protest against it all from a resident in the neighbourhood who pays £7000 a year in wages, and who has again and again enriched the world's knowledge of vanished empires in the East by archaeological expeditions which have cost him untold wealth. Such a man's views do not interest the tank expert at the War Office, but the great mass of the nation,

we are sure, will feel that we could do with many more men with his outlook and many fewer men with the outlook of the tank expert.

In any case Lulworth must be saved. Our countryside exists for peace, not for war. We are not going to be governed by tyrannous officials who care nothing for quiet and beauty and the tranquil places of our Motherland. Lord Shaftesbury is taking up the matter. The Dorset County Council has decided to do all in its power to oppose the scheme. But ultimately it rests with public opinion to decide which way the matter shall go. If we raise a public clamour the War Office will change its mind; if we are silent it will know that we are fit only to be governed by officials.

Lulworth was saved in our time from German bombs. It must now be saved again, this time from British tanks.

TWO WAYS OF GOING TO THE CONTINENT
OLDEST AND NEWEST

Men who Swam to France and Men who Flew to Sweden

A GREAT RECORD BEATEN

At the delightful August Bank Holiday week-end this year, when innumerable multitudes were seeking change and joyful rest all over rural England and tens of thousands were going abroad by steamers packed with perspiring humanity, two ways of leaving our island home were being practised in remarkable contrast, illustrating man's oldest and newest means of travel.

Henry Sullivan, from the United States, was going back to the very oldest manner of crossing watery obstacles, by swimming from England to France in 27 hours, and Captain Macmillan and Captain Malins were flying in the newest style through heavy gales and storms from England to Sweden—750 miles—in a little over seven hours. In the meantime Mr. F. L. Barnard, finding better weather more to the south, was flying from London to Prague in eight hours, with two hours' stoppages at Brussels, Cologne, and Frankfurt.

Battling with the Tide

Henry Sullivan, the unbeatable American swimmer, a 16-stone man, made the longest swim on record. Swept backward by the tide when he was within a mile or two of the French coast, he could only hope for success by stern endurance and battling against the tide till it should turn and again drift him toward France.

This he did, and made good his landing, after 26 hours and 43 minutes in the water. The first man who swam the Channel to France, Captain Webb, took five hours less time, and the second, the Yorkshireman Thomas Burgess, nearly four hours less time. Thus Sullivan's feat was great from the point of view of endurance, and also of actual distance travelled, for his whole course, forward and backward and forward again, totalled 56 miles, though the direct distance is only 21 miles.

Success After Failure

Sullivan's success is the more welcome because it followed six failures. As an instance of what the human body can endure and do by its natural resources, without help beyond its own strength and skill (though, of course, the swimmer was accompanied by boats that supplied food), this feat is notable and interesting.

But a few days later a very wonderful thing happened, for an Italian from the Argentine, Sebastian Tiraboschi, who had tried and almost succeeded last year, again attempted to swim the Channel, starting from the French side. His success was beyond all expectation, for he went from shore to shore in 16 hours 23 minutes, thus beating even Captain Webb's record in 1875 by over five hours. After the longest, the shortest! It was a very wonderful achievement, especially as Tiraboschi is 35 years old.

And now contrast this effort of man's self-contained strength, without mechanical aids, with the swift and far flights that were being made at the same time.

Man's Conquest of the Air

The travellers to Gothenburg by air went, with ease to themselves, through stormy weather, over three countries and two seas, 35 times the distance across the Channel, and they did it in but little more than one-fourth of the time.

They were carried by a machine that could fly over 100 miles an hour as an ordinary pace, that could climb 7000 feet in five minutes, and continue flying on her back with her passengers' heads down as safely as with their heads up, so complete is man's conquest of travel through the air.

The August feats by sea and air measure very impressively the extra powers with which his ever-active mind has endowed man's puny body.

STORING UP STEAM WONDERFUL INVENTION OF A SWEDISH ENGINEER

How a Tank of Water is Made
to Hold the Steam for Weeks

PRINCIPLE OF THE SODA WATER BOTTLE

A Swedish engineer, Dr. Ruths, has made a wonderful discovery. He has found out how to store up steam, and invented an apparatus in which it can be packed and kept ready for use as wanted. The apparatus is called the Ruths steam accumulator, and already several have been built and have proved satisfactory in every way.

Steam has been stored up in one of these accumulators, or storage tanks, for three weeks, and has then been used with a loss of only two per cent. The possibilities of the principle are endless, for steam is used not only to drive engines, but for a variety of other purposes, such as making the cylinders hot for drying the moist sheets of paper in a paper factory, cooking jams, and so on.

Steam Under Pressure

Hitherto steam, which is simply the invisible vapour of water, or water in a gaseous form, has had to be made as required for use; and where the use was not continuous the expense of alternately stoking up and letting down the furnaces has been great. A pound of water, which occupies a little more than one-sixty-second of a cubic foot when in the liquid state, will, as steam, occupy nearly 27 cubic feet. Even, therefore, if temperature conditions could be maintained it would be impossible to store much steam in the ordinary way. It might, of course, be stored under pressure like oxygen, but that would be very expensive.

Tank with Double Walls

The new apparatus of Dr. Ruths consists of a large steel tank with rounded ends and double walls, and the insulation is so perfect that even when the temperature inside is exceedingly high the outside walls are cold. This tank is filled about nine-tenths full of water, and there is a pipe leading from a boiler where the steam is produced into the tank, and communicating with a pipe running the entire length of the tank, provided with numerous small charging necks, connected at right angles to the horizontal pipe. There are also the necessary valves controlling the entry and the outlet.

When steam is required in the factory it passes directly from the boiler where it is made to the factory; but if, for any reason, any operation is suspended for a time so that more steam is being produced than is required the steam then goes through the pipe into the tank and is forced into the water.

The temperature in the tank is very high, so that the steam remains a gas; but the water does not turn into steam because the pressure prevents it. It must be remembered that water boils, or turns into steam, at 100 degrees Centigrade (or 212 degrees Fahrenheit) only at ordinary atmospheric pressure.

Boiling Water on Mont Blanc

When the pressure is less the water boils at a much lower temperature. On the top of Mont Blanc, for instance, it boils at 83 degrees Centigrade. On the other hand, with a pressure of three atmospheres, or about 45 pounds to the square inch, water must be 190 degrees Centigrade before it boils. This explains why the steam in the tank can remain steam and the water remain water.

The principle of the Ruths steam accumulator is really that of a bottle of soda water. The steam, or gaseous water, is forced into the liquid water just as carbon dioxide gas is forced into soda water under pressure. Remove the pressure and the gas escapes. So, when the stored-up steam is required, the pressure is removed and the steam escapes through a pipe, and can be used.

THE PROMS JOLLY CONCERTS BACK AGAIN

Most Popular Musical Events
in Town

THE ENTHUSIASM OF SIR HENRY WOOD

By Our Music Correspondent

Are there any more delightful concerts than the Promenade Concerts, now beginning again? The writer knows of none. And the odd thing is that they are given at the very time when there is supposed to be no demand for music and all other concerts are suspended.

But perhaps this is part of the secret of their popularity. Just as London itself has a peculiar charm when it is supposed to be empty, so one enjoys the "Proms" all the more because they are given in the slack season and have themselves such a delightfully free-and-easy holiday atmosphere.

The Best of Music

Then, too, the actual music—how good it is! Where in the wide world are there any other popular concerts which maintain such a high standard in their programmes? It would be difficult to find them, I fancy—even in Germany.

And the quality of the performances is worthy of the music, for which fact we have to thank Sir Henry Wood, who has meant more to these concerts in every way than it is possible to say. Not the least of his qualities is that enthusiasm which stimulates not only his players, but his audience as well.

How does he manage to keep it up? The thing is a mystery. Whatever the work in hand, whether a trifle like Järnefelt's Praeludium or a Brahms Symphony, a composition he has played a hundred times before or a first performance, Sir Henry conducts as if his life depended on the issue, and this, no doubt, is half his secret.

A Magnetic Presence

How much his magnetic presence means to the Promenades was very plainly shown some years ago when for a time he had to be away and his place was taken by a famous French conductor. The result was quite extraordinary. All the life and interest seemed to go out of the concerts for the time.

Monsieur Colonne obtained excellent performances, but they fell flat; the element of personal magnetism was not there. With other audiences it might have been different. But the faithful Promenaders wanted Sir Henry, and no one else.

The Promenade audiences deserve a few words. In their heartiness and enthusiasm they are hard to beat. Here is nothing of apathy and cynical criticism, but downright, unrestrained enjoyment of the good things provided.

Enthusiasm of the Audience

A class of work which always seems to appeal specially to this audience is the concerto, perhaps because here something of a sporting element seems to be introduced. The soloist sitting at the piano or standing alone with his violin—one against so many, as it were—appeals to the popular imagination, and a tempestuous reception is assured. If the soloist happens to be a woman, perhaps a girl, the enthusiasm knows no bounds.

But, of course, symphonies, overtures, and the rest, are warmly welcomed too; indeed, it would be difficult to say what the Promenaders do not like. Perhaps they are almost too catholic in their tastes, inasmuch as they seem to find equal delight in works of all descriptions and all degrees of worth.

Still, this is perhaps a fault on the right side, for a healthy and all-round appetite is certainly no bad foundation on which to build.

C.N. COUNTRY POSTBOX

Our Country Postbox is full of interesting things, and we give a few of them here.

THE BRAVE LITTLE THINGS

The following rather curious nesting-places are reported to us by our readers.

A robin's nest in a wagon which is taken to the woods each day and loaded with trees, but is visited each night by the robin, and has four eggs in it.

A swallow's nest in the middle of a rope hanging from the roof of a shed.

A wagtail's nest, with five eggs, under a live rail on the London, Midland, and Scottish permanent way.

A swallow's nest on the top of a hoe that rests on a rake hanging from the wall of a tool house. People are always in and out, but the bird takes no notice whatever of them.

HOW A WOOD-PIGEON WAS REARED

A North Country reader gives this account of how a wood-pigeon was reared.

Strolling through a wood, I picked up a young wood-pigeon that had fallen from its nest. It was only a few days old. I bought some cod-liver oil food and gave it about a teaspoonful for its first meal every day. The rest of its meals consisted of bread soaked in some warm milk.

The box in which it was placed was put on a rack near the fire, and was removed to a cooler spot when the heat was too great.

Within a short time the bird grew its feathers and was very lively, springing about the box when it recognised my hand and thought I was about to feed it.

It is now nearly fully grown, and it flies about among the other pigeons, but always returns at the close of day.

CATS, DOGS, AND SNAKES

A South African reader, who has noted a comment in the C.N. on the inability of the cat to hold its own against deadly snakes in Australia, gives a different view of the cat as a snake hunter in Cape Colony.

The most common of our many varieties of snakes is the puff adder. Our cat, a two-year-old of the ordinary house variety, has accounted for a number of snakes, including the most poisonous. A neighbour of mine has a cat which is an artist in despatching puff adders, and all over the country one hears of cats being kept specially to kill snakes.

Their manner of attack is first to make the snake strike, and then jump over the head so that it misses its aim. Then they catch it behind the head and hang on till the snake is dead.

On the other hand, dogs have no chance in dealing with deadly snakes, for they inevitably sniff at the snake first, and so get bitten.

AN ANCIENT EEL

A Greenock reader sends us the following interesting information about an eel.

Over thirty years ago a young boy brought home a pailful of fish.

Among them was a young eel, which outlived all his companions. He was about the size of a slate pencil at first, and now he is a foot long.

Occasionally he is fed with a few small worms, but in winter, when the ground is hard or covered with snow, so that worms cannot be had, the water in his dish is changed daily, and the eel finds enough nourishment in the water to keep him alive.

He is quite blind now, and it is only when worms which are dropped into the dish touch his body that he quickly swings round and finds them.

The eel knows when rain is coming, and dives down among the small stones in the bottom of his dish, and makes a noise with them.

On two separate occasions, after a thunderstorm, he was found in the morning lying on the floor.

THE MAGAZINE OF GOOD THINGS

C.N. MONTHLY

Why the English-Speaking
World Loves It

BRITISH EMPIRE'S FIGHT FOR LIFE

The Times, the greatest newspaper in the world, has just been speaking of the ever-fascinating *My Magazine*, and we may spend a minute or two in looking at the new number now lying on the bookstalls with this issue of the C.N.

The people who can afford to travel are few, and the people who wish they could are legion. But a wonderful tour is now starting, and all who long to see the magnificent pictures Michael Angelo painted on the ceiling of the Sistine Chapel in Rome, or the Breton peasants and their prehistoric stones, or African skies darkened by a locust swarm sixty miles long, can book their passage by spending a shilling on the September number of the C.N. Monthly.

Romance of Foreign Lands

There are some people who do not feel the romance of foreign lands. They say that home is good enough for them; but they wish they did not reach home each night too tired to study. They are ashamed of their half knowledge. For instance, they know the names of Socrates, Plato, or Aristotle; but they are not clear about the teachings that made these names famous down the ages and are the foundation of modern thought. Thick books of philosophy are hard work for tired minds. In this new number of *My Magazine* the ideas of these three immortals are described so clearly that a child can understand and remember them.

And another idea that captivates us all in these new pages is that behind the article in which a traveller is imagined as looking down from an aeroplane on the British Empire, seeing the everlasting struggle for existence that must go on everywhere if the great dominions of the flag are to flourish. The British Empire's Fight for Life—what an idea!

Our Friend the Microbe

The weariest brain must quicken at the astonishing tale this magazine tells of the microbe, once thought of only as a bringer of disease, but now one of our best servants, making motor spirit for us out of such queer things as straw and old rags.

The duldest heart must be touched by the anecdotes in the article which sets out to discover an answer to the question Why does a dog die for his master? And here is another startling thought for the jaded mind—perhaps it was the terrible Ice Age that changed our ancestor from a lazy, fruit-eating animal into a hardy, inventive man who lit fires and made tools.

A Beautiful World

What caused the Ice Age? Why do stars shine? A man of science comes to the reader's armchair and explains such things, and long before you tire his place is taken by poets from America, Ireland, and England long ago. There are stories, too, and a wealth of pictures, for the Editor believes that Nature is right in loading every petal and wing-scale with colour. No one can read the C.N. Monthly without coming to the conclusion that the world is a beautiful and adventurous place, good to live in.

Look on the bookstalls for a lady of the olden time leaning her mischievous face and clasped hands on a book; quite certainly she believes in this happy wisdom, and invites you to bring it home while there are still a few copies left for C.N. readers.

August 25, 1923

The Children's Newspaper

9

THE WEEK IN GEOGRAPHY

THE NEW ZEALAND ALPS

BARRIER BETWEEN THE EAST AND WEST

The Southern Alps of New Zealand have just been pierced at Arthur's Pass by a tunnel over five miles long, bored through the solid rock. This is the largest tunnel anywhere in the British Empire, and the seventh longest to be found in the world.

The Prime Minister of New Zealand, who opened the tunnel to traffic, said he was proud of the fact that the whole of the machinery employed was British made, and certainly the tunnel is a triumph of British engineering skill, for the difficulties were many and great.

The Southern Alps, which have thus been pierced, consist of a long line of lofty mountains rising far above the limit of perpetual snow. They form a part of the long range of mountains which runs through both islands, and the culminating point of the Southern Alps, Mount Cook, 12,350 feet high, is no mean rival to Mont Blanc in the European Alps. Another giant peak is Mount Hochstetter, 11,200 feet high, and the loftier valleys of the range are filled with great glaciers which feed the Alpine lakes resulting from still mightier glaciers of earlier times.

Mountains with Few Passes

These mountains have always formed a great and difficult barrier between the eastern and western parts of South Island, for there are only one or two passes, most of them practicable only for foot passengers. At the southern end of the Alps is the Haast Pass, 1716 feet above sea level, and the next pass to the north, the Fitzgerald Pass, is 7000 feet high. Only at Arthur's Pass, 3038 feet up, and at a point between Mount St. Arnaud and Beeby's Knob, are there roads fit for coaches.

Now the train will convey passengers comfortably from one side of the island to the other. The railway on the Westland side of the mountains climbs a river gorge, running through 17 tunnels and crossing three steel viaducts, one of which is 230 feet high, before it passes through the great tunnel at Arthur's Pass. The coach road here was considered a great engineering feat, but it has been far surpassed by the new tunnel and railroad connection.

Hundreds of Miles of Snow

Most of the loftiest peaks are grouped around Mount Cook, and the snowfields in that area cover many hundreds of square miles and are dominated by glittering peaks discharging their glaciers down the slopes. Such Alpine scenery is not generally associated with New Zealand in the minds of English people.

On the west side of the mountains the glaciers, being fed by more abundant snows, descend much lower than on the east side, the Cook Glacier approaching to within about 800 feet of sea level. That these glaciers were in former times much bigger than they are today is proved by the moraines, and polished rocks left free on their present margins. These were evidently once covered by the flowing ice.

Millions of Horse-Power

Rising abruptly above the western seaboard, the New Zealand Alps have too steep a slope on that side to allow the running waters from the glaciers to collect in large basins and form lakes; but on the eastern declivity, with the plains stretching away to the east coast, there are numerous depressions where the glaciers have been replaced by lakes.

One day we shall hear more of these Southern Alps, for the long, glittering chain sends down swiftly rushing water capable of generating nearly four million horse-power, and no doubt before long much of this will be harnessed for use.

TESTING A GIRDER

Machine that Can Crumple Up a Steel Beam

A COLUMN SUPPORTING THOUSANDS OF TONS

The giant skyscrapers of America, which consist of steel frameworks covered with concrete slabs, are of enormous weight, and the strain upon the metal girders is tremendous.

It is, therefore, essential that there should be some satisfactory way of testing the girders before they are used, and the United States Bureau of Standards has just installed in its laboratory a machine which can exert a crushing force of 1200 tons and crumple up a girder as though it were paper.

In appearance the apparatus is like a huge lathe for turning steel. On a long bed is mounted a movable tailpiece, against which one end of a sample steel column or girder is braced, while a head-piece exerts pressure at the other end.

A registering instrument is attached, and this is so sensitive that when a pressure of a million or more tons is being exerted an added pressure of only a pound or two is recorded.

Of course enormous latitude for safety is allowed in the strength of a girder for building; one that is to support 300 tons may be tested up to 1200 tons.

In some of the bigger skyscrapers the weight that the steel columns have to bear is far greater than this new apparatus of the Standards Bureau allows for. A single column in the great Woolworth Building, for instance, supports a load of 4700 tons.

There was no way of testing such a column directly, but the engineers tested smaller columns until they broke under the strain, and then worked out the size of column needed to support the world's tallest building.

TROUBLESOME PRIESTS

Backward Ideas in Mesopotamia

An unexpected difficulty has arisen in Mesopotamia.

The people of Persia are Mohammedans of the Shiah sect, and so are a majority of the people of Mesopotamia. Their most sacred city is Kerbela, in Mesopotamia. There, and in Bagdad, the Persian priests have much religious influence, and a considerable number of them are trying to persuade the people to refrain from voting at a general election for a people's parliament.

They do not believe in popular government, and are trying to prevent it from being introduced. This, they think, is a religious duty.

The Government of King Feisul is treating these religious politicians as disturbers of the country's peace, and it is turning them out of Mesopotamia.

Apparently the people are taking sides with the Government, and are agreeing that it must deal firmly with those who resist the establishment of a system based on trust in the people.

AN EXCITING TIME

Adventures of a Violin

An 86-year-old violin, made in Prague in 1837, has just been having a remarkable series of adventures.

The instrument, which was valued at £500, was stolen while its owner was on a tour in Western Canada. It was finally traced to Montana by the Royal Canadian Mounted Police, where it was recovered. While it was being taken back to Canada, however, the car in which it was being carried overturned, and the precious cargo was smashed into eighty-five pieces.

Nothing daunted, the musician sent the wreckage to an expert in Washington, who undertook to patch it up. This has now been completed, and so skillfully has the work been done that the tone has in no way been impaired.

C.N. QUESTION BOX

All questions must be asked on postcards; one question on each card, with name and address. The Editor regrets that it is not possible to answer all the questions sent in.

Why Does a Glass of Water Magnify Objects?

The glass filled with water acts in the same way as a convex lens.

Why Do Fish that Live in Salt Water Taste Fresh?

Because they do not take the salt of the water and assimilate it into their system.

Has the Top of Mount Everest Ever been Reached?

No; the recent attempt was the nearest that men have ever come to reaching the top of the world's highest mountain.

What Does the Prefix Bally or Balli mean in the Names of Irish Towns?

It means a town or village, but originally meant merely a place, usually, a place fenced round.

What is the Chief Industry of Wales?

The coal industry would, no doubt, be regarded as the chief industry of the principality.

Are Fishbones Injurious to Dogs?

Hard fishbones should never be given to dogs, as they may stick in their throats and cause trouble. The soft bones of skate, however, do no harm.

Why is the Sea Salt?

The sea at first must have been fresh, but the rivers running into the sea all over the world carry into it various salts dissolved from the land. This going on for thousands of years has made the sea salt.

How Much Sleep Should a Child of Eleven Have?

Twelve hours, if possible. A child cannot have too much sleep, as when it has had sufficient Nature will wake it up. Most boys and girls in these days get far too little sleep.

Which Has Two Humps, the Camel or the Dromedary?

The Bactrian camel has two humps and the Arabian camel one. The dromedary is merely a specially well-bred Arabian camel, in the same way as a racehorse is a horse bred for speed.

What is a Simnel Cake?

A rich cake eaten in Lancashire in Mid-Lent in commemoration of the banquet given by Joseph to his brethren in Egypt, which forms the first lesson of Mid-Lent Sunday. Simnel comes from a Latin word meaning wheat flour of the finest quality.

Why When There is a New Moon Do We See Only a Crescent?

Because we do not see the side of the Moon the Sun is shining on at that particular time, but only the edge of the illuminated surface. As the relative positions of Sun, Moon, and Earth change we see more and more of this illuminated surface.

What are Cyclones and Anti-Cyclones?

In weather reports a cyclone means a region of low barometric pressure, while an anti-cyclone is a region in which the barometric pressure is high. The causes are unknown. A tornado, or whirling storm, is sometimes called a cyclone.

What Tends to Make Some Youths Tall and Others Short?

Of course healthy exercise, good food, and fresh air tend to make a youth attain his full height and development, but, apart from this, height is a question of heredity. A tall youth is the product of more or less tall parents and ancestors, and a short youth of short ancestors.

Why Do a Baby Horse's Legs Never Grow Longer than They are at Birth?

They do grow, but do not keep the same proportion to the body that they had at birth. A human baby's legs, which at birth are very short compared with its body, become larger in proportion to the body as the baby grows. In the horse the legs become less in proportion to the body as the horse grows.

How Many Words are There in the Bible?

There are 593,493 words in the Old Testament and 181,253 in the New Testament, making 774,746 in all. The Apocrypha has 125,185 words. In a recent answer it should have been stated that Yorkshire had more letters than the Bible had letters, not that it had words.

What is the Origin of the Words " & Co." on a Cheque?

For safety some cheques had written across them the name of a bank through which they had to be presented for payment. Then the practice arose of leaving out the name of a particular bank and drawing only two lines with the words " & Co.," meaning any bank. This makes it impossible to get the money for the cheque directly over the counter; it must be passed through a banking account.

SPEEDING AWAY FROM JUPITER

INCREASING THE SPACE BETWEEN TWO WORLDS

The Only Bright Planet Now in the Sky

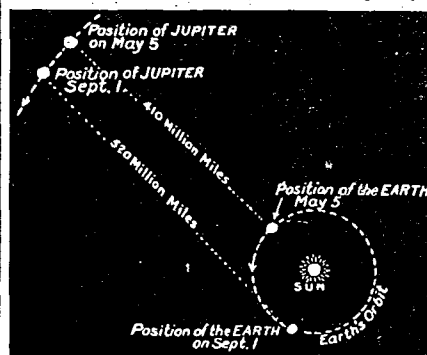
SATURN LOST TO SIGHT

By Our Astronomical Correspondent

Jupiter, whose lustrous orb has attracted so much attention during the spring and summer evenings, is now passing into regions far beyond the Sun, and will, therefore, be discernible for only another three or four weeks.

He is now to be seen low in the south-west, shining like a celestial lamp, above, and to the left of, the place where the Sun has set.

Saturn has already passed beyond our vision, being lost amid the sunset glow, so Jupiter is the only bright planet left to adorn the evening sky;



This diagram shows how the Earth is now rapidly leaving Jupiter behind

and he, too, in about a month's time will enter that sunset region of rosy tints, and so get beyond our vision.

This approach of the planets to the Sun is, of course, only apparent, an optical effect of perspective; actually, Jupiter is getting farther away from us and far beyond the Sun.

The relative positions of the Earth and Jupiter, both now and when they were at their nearest four months ago, can be seen from the star map, which shows how our world is now speeding away from Jupiter. Travelling at 19 miles a second, every day takes her 1,600,000 miles farther away from Jupiter; while Jupiter, travelling at eight miles a second in a right-to-left direction relative to our Earth, is doing little to reduce the rapidly increasing space between the two worlds.

Why Jupiter Seems Smaller

At the beginning of May, when our world was between the Sun and Jupiter and Jupiter at his nearest, he was then but 410 million miles away. Now he is about 520 million miles from us, and appears much smaller. Then Jupiter's apparent diameter was 42 seconds of arc; now he appears but 32 seconds of arc wide—only three-quarters of what he was—so less detail is observable.

Incidentally, it should be said that degrees, minutes, and seconds of arc represent the only true and practicable method of measuring apparent sizes of objects and spaces in the firmament; the measurement by feet or inches sometimes used by amateurs is misleading, as the scale varies with the distance the foot rule is held from the eye.

A Celestial Foot Rule

The Moon, appearing approximately half a degree wide, and therefore about 30 minutes of arc, makes a convenient celestial foot rule; but only a very rough one, because the Moon appears sometimes a couple of minutes larger, and sometimes a little smaller, than 30 minutes of arc, or half a degree.

Now, as Jupiter appears at present 32 seconds of arc wide, about 60 globes of the apparent size of Jupiter could be placed side by side across the disc of the Moon. Thus we can understand why we cannot see the globe of Jupiter with the naked eye. G. F. M.

THE HEIR OF A HUNDRED KINGS

The Strange Adventures
of a Schoolboy in Africa

: : Told by
Herbert Strang

CHAPTER 52 The Storm Gathers

DR. PARADINE had at last realised that it was no longer a question of an ancient civilisation. There was an ominous look of grim determination upon the dark faces of the throng of priests.

"But they are unarmed, James," he said. "They are carrying censers, fans, holy water vessels, but no lethal weapons."

"True enough, and I am glad to see they have no warriors with them. But the question is, will they array the warriors and the people at large against us? It's all very well to say that Roger is their king, but he's a stranger, unknown to them, unable to speak their language. He has no hold on them. If they rise, our case is desperate. I've only about thirty cartridges."

"Pray Heaven it doesn't come to that," said the Doctor. "A little common sense—"

"My dear man, it's no good talking of common sense when you have ignorant fanatics to deal with," interrupted his brother impatiently. "They will work the people up to a frenzy, and then—Heaven knows what will be the end of it!"

His brother, having no useful advice to offer at the moment, contented himself with lifting his umbrella, regarding it sternly, and laying it softly down again.

"I've no objection to healthy adventure," Mr. Paradine went on, "but I confess I never anticipated coming up against anything quite as unexpected as this."

Roger, who had been thinking hard while his uncles were talking, suddenly turned.

"I've an idea," he cried. "The people have an immense veneration for old Hoteb. It was he who made me king; he ought to get us out of this mess. It's all his doing. It's up to him to see us through. I believe he's retired to his hermitage. I'll send for him."

"Well, it can't do any harm," said Mr. Paradine. "Suleiman had better smuggle a trusty messenger out of the palace before the priests close in."

"See to it, Suleiman," said Roger.

They withdrew to the rear of the balcony, where they could watch without being themselves seen.

The body of white-robed priests came steadily on: Crowds of people, puzzled and anxious, gathered on either side, and filled the wide space in front of the palace.

The procession entered the courtyard. At the gate the high priest held a brief colloquy with the two warriors on guard there; then, advanced alone, his followers halting in a serried mass.

"I'll go down and meet him," said Roger. "Perhaps you will come too, but keep behind me, out of sight. Here's Suleiman back; he'll come with me."

They descended into the hall of the palace. The two uncles took up their position just within the banquetting chamber at the side. Roger, carrying only his ebony staff, advanced with Suleiman to the head of the short flight of steps at the door, and there awaited the high priest.

CHAPTER 53 The Storm Breaks

THE pontiff had arrayed himself in his ceremonial robe, the leopard's skin. A long curled wig fell back over his neck; his breast was covered with a sort of bib of goffered linen; on his arms, and wrists he wore plain bracelets, and on his feet sandals of palm leaves and papyrus.

At the foot of the steps he made a low reverence, as if awaiting permission to speak.

"What do you seek, O holy man?" asked Roger, Suleiman interpreting.

The priest raised himself, stood erect, and, in a loud voice that could be distinctly heard by his followers at the gate, he began a solemn address.

"Know, O King, lord of the land of Kush, that I have invoked Amen-ra and the high gods for a sign of their pleasure regarding the strangers who have set foot within our borders."

"The gods have given a sign; they have spoken; they demand the sacrifice of these impious intruders, according to the law and custom in Kush since the third Sanka-ra the illustrious closed the land to all who are not of our blood."

A shout of approval broke from the priests assembled at the gate. Gathering force, the high priest went on:

"Now, then, let Sanka-ra deliver up these impious strangers to the vengeance of the gods of his forefathers, lest the anger of the gods wax hot against the people of Kush, and visit them with a multitude of troubles; yea, lest their wrath burn fiercely against Sanka-ra himself."

Suleiman was a very imperfect translator, but Roger understood the drift of the high priest's address and was uneasy at the approving cries of his followers. Trying to recall the Eastern modes of expression he had read in the Bible, he said:

"I doubt, O most reverend high priest, whether you have read the signs aright. Do not the high gods of Kush love justice and mercy? Is it their will that innocent men should suffer? These strangers from far lands have strayed, ignorantly, within the borders of Kush. It is for us to have pity on them. I myself will lead them back by the way they came, and lay a strict charge upon them that they return not again."

"I thought we might all do a bunk together," he explained to his uncles afterwards.

His words appeared to make little impression on his audience.

"O Sanka-ra, are we not your slaves?" said the high priest. "But in truth all the kings who have reigned in Kush before you have been obedient to the high gods. It is the will of the gods that all strangers who set foot within this land shall die. Shall we set their will at naught?"

"It matters not why the strangers came, nor whence; it is our part to fulfil the gods' behest. Deliver up to us these three unhallowed men; that we may slay them on the altars of Amen-ra and Ptah, the gods of our fathers."

"It shall not be," said Roger firmly. "I will hear no more. I, Sanka-ra, bid you beware. These strangers, my guests, have the terrible weapons of their own land, weapons unknown in Kush. Do not provoke them. In due time I myself—once more I say it—will conduct them to our borders. Until then, most reverend, I bid you hold your peace."

He waved his staff as a signal of dismissal. Then, turning slowly, he walked back into the palace with as much dignity as he could muster, remembering how his Uncle James had turned from the Basé weeks before.

"Shut the door, Suleiman," he said.

His voice was shaking, but he managed to control his features.

He had noticed, as Suleiman translated his speech sentence by sentence, that the priests in the courtyard had shown increasing signs of restlessness and indignation. When they saw the portals closing against their leader, a howl

of rage burst from them, and they began to sweep across the open space.

It was clear that further parleying was useless: they meant business.

"Quick with the bars!" cried Roger.

Suleiman had only just fixed the bars in their sockets when the door shook with a tremendous thud. The priests, screaming with anger, had rushed forward and thrown themselves against it.

"The frenzy is on them," said Mr. Paradine, coming out into the hall. "They are in an ugly humour. Is it the beginning of the end?"

CHAPTER 54

The Fight on the Stairs

"WHERE are our warriors?" he asked, looking round. Not a man of them was to be seen.

"They're afraid of excommunication or something, I suppose," said Mr. Paradine. "It seems that we shall have to depend on ourselves."

He examined the door, which was shaking under the assaults of the infuriated priests.

"It seems sound," he said. "They won't batter it down with their bare fists. But what about the back doors, Roger? They may get in there."

Roger hurried to the rear of the palace.

He found the doors wide open. The warriors had evidently fled, carrying with them the whole palace staff, from the chamberlain downwards.

Roger barred up all the doors and ran back.

"A pack of cowards!" he cried. "But I say, Uncle, let's get up to the roof. It's flat. We can stand there and see what's going on outside."

"A capital notion!" said Mr. Paradine. "A staircase is more easily defended than an open hall. And, of course, if they mean to break in, they'll do it sooner or later. We'll collect all the arms; we'll want some for ourselves, and the others mustn't be left for them. Make yourself useful, Ben. Open your umbrella and turn it upside down; it'll make a good basket."

The Doctor, who was not too sure that his brother was not making fun of him, picked up his faithful friend, opened it, and held it while the others flung into it every weapon they could lay their hands upon.

In a few minutes they had reached the roof, Suleiman and Hassan hauling up the laden umbrella.

"We have only the priests to reckon with at present," said Mr. Paradine, looking over the parapet. "The crowd is getting

excited, but there's no sign of active hostility just at present."

"If you will allow me to explain that we are peaceful travellers—the Doctor began.

"Neither your voice nor Suleiman's would be heard above the din those priests are making," said his brother. "But make your mind easy. We won't fight at all unless we must. If it comes to the push we are entitled to defend ourselves. You can use your umbrella if you like. The rest of us can make a trial of these ancient weapons—the flat of the sword, Roger, or the butt of your rifle. We won't fire a shot except at the last extremity."

"I wonder whether old Hoteb will come along?" said Roger. "There's no sign of him at present."

They stood in a group looking out over the crowd. As yet the people gave no indication of taking a hand. Roger noticed, away to the left, the commander of the warriors holding his men in check.

"I expect he's a friend of Muleh's," he thought.

Presently there came the noise of breaking woodwork at one of the back doors.

"Come!" cried Mr. Paradine. "We must meet them on the stairs."

He posted himself with Roger half-way down the staircase, each holding his rifle reversed. The Doctor stood just behind, grasping his furred umbrella, with Suleiman and Hassan on either side; each armed with a short sword.

A body of priests swarmed into the palace and flung open the great door in front. In stalked the high priest. He threw a glance round, caught sight of the Englishmen on the stairs, and yelled an order to his followers.

Only men worked up to a pitch of frenzy would have acted as the priests then did. A group of them, with a glare of madness in their eyes, rushed to the foot of the staircase and, unarmed as they were, attempted to ascend.

Thrust back by the butts of the rifles, they returned to the attack. Roger struck with his rifle; the butt was seized by a strapping young priest. At the same moment two others hurled themselves on Mr. Paradine. One stooped, caught him by the leg, and began to haul him down.

Roger instantly let his rifle go. The man who held it fell back headlong upon his fellows below him. Roger doubled his fist, struck out at the priest grappling with his uncle, and hurled him back. Then, darting downwards, he landed a stinging blow on the ear of the man clinging to his uncle's trousers.

"Well done, my boy!" cried Mr. Paradine. "Bare fists!"

His blood was up now. Springing down the steps, he let out with his right and left, and for a few moments his fists were busy on the heads of the enemy.

Roger seconded him with great gusto. Behind them the Doctor brandished his umbrella.

The priests, no doubt, were unused to any kind of fighting. It is probable that fisticuffs was a method unknown to them even by tradition. Yelling, they gave ground. Some of them crawled on all-fours to the doors, others hastily took to their heels, a few remained lying more or less stunned on the stone floor.

At one side stood the high priest, clamorously urging them to stand fast. But in a minute or two he saw himself deserted, and wrung his hands in despair.

"Alia!" ejaculated Mr. Paradine.

With a sudden rush that took the pontiff all aback he seized him, dragged him to the staircase, and showed him upward.

The Doctor was still brandishing his umbrella.

Up went the priest, helpless in the strong grip of the Englishman. They came to the roof.

"A valuable hostage!" cried Mr. Paradine. "Roger, my boy, I never enjoyed a fight so much in my life!"

TO BE CONTINUED

Who Was He?

A King of the North

WHEN the great Wars of Religion that devastated Europe for so many years in the seventeenth century were being fought a king came out of the North and changed the course of victory.

He was a wise and able monarch and had inherited much of the character of his grandfather, a great monarch who in the previous century had brought his country out of a state of anarchy and war into one of peace and prosperity.

The grandson came to the throne at a time of great difficulty. War and disorder were ruining his realm, but though only a boy of seventeen he set about bringing order out of chaos and building up his kingdom on a firm foundation.

A neighbouring monarch claimed his throne and invaded his land; but the young king fought a masterly campaign, defeated the invader and another ruler who helped the invader, and concluded an honourable peace.

He then made friends with his nobility and reorganised his kingdom on strong lines, raising men and money, and recovering from an adjoining kingdom provinces which had been taken from his own country some time before.

These marvellous exploits on the part of so young a monarch drew the eyes of all Europe to him, and those who professed the same faith as he sought his help in the great struggle which then divided the nations.

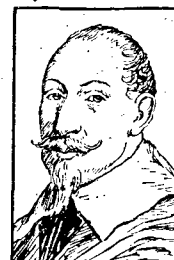
He responded to the call, and, marching with a powerful army against the common foe, won brilliant victories. The German emperor, his opponent, was compelled to recall to the command of his armies a general whom he had dismissed.

He had tried to make terms with the king from the North, offering him large territories if he would end the campaign, but the young king nobly answered that he had not entered the war for his own advantage but to help his co-religionists, and he would hear nothing of the proposed bribe.

The king continued successful, and at last his army and that of the emperor's commander met, and a fierce battle took place. The king's army went into the fight singing Luther's hymn "A safe stronghold our God is still."

At the critical moment he dismounted and led the attack, and afterwards headed a second attack on horseback, but a ball struck him from behind, and he fell dead. His riderless horse ran off, and his men were so infuriated that they rushed forward and drove the enemy from the field.

Some think he was assassinated by his cousin, who soon after deserted to the other side. No one, however, can know for certain. Here is his portrait. Who was he?



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This jolly paper is specially written and printed for VERY little children. Only easy words which **any** child can understand are used, and they are divided into syllables to make reading easy. With CHICKS' OWN children learn to read while enjoying to the full its bright Coloured Pictures, splendid stories, and funny jokes. Buy a copy TODAY. It is on sale every Tuesday.

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Summer Winds Bring Music Over Land and Sea



DI MERRYMAN

A BUSINESS man was hard at work in his office when a friend called in to see him.

"Phew!" exclaimed the visitor.

"Your room is as hot as an oven."

"Quite so," replied the busy one.

"That is as it should be, for it is here that I make my bread."

□ □ □

Built-up Names

EACH of the following sentences represents the name of a well-known fruit. Can you find out what they are?

A bank to confine water, and what every man must be.

An exclamation, and to rove.

A tree that grows in sandy soil, and a well-known fruit.

A domestic bird, and a small fruit.

A month, omitting the last letter, and a shepherd's hut.

A colour, and a pledge.

Answers next week

□ □ □

WHY is a selfish friend like the letter P?

Because he is the first in pity and the last in help.

□ □ □

Something Wrong Somewhere

ARITHMETIC, we are told, is the science of truth, but figures lead us to curious results sometimes.

For instance, if one man can build a shed in ten days, ten men can build it in one day. Then 240 men will build it in an hour, 14,400 in one minute, and 864,000 in one second. As a matter of fact, they could not drive one nail in that time.

Then again, if one ship can cross the Atlantic in seven days, seven ships can cross it in one day! It is difficult to believe that.

□ □ □

Do You Live in Gateshead?

THE word has nothing to do with a gate, but is really Goat's-head, and may refer to a goat's head set on a pole as a tribal emblem by some people who settled here in ancient times.

□ □ □

A Puzzle in Rhyme

MY first and my last are alike,

You will own;

My second and fourth are the same;

Of either my first or my fifth,

Be it known,

My third just its half will proclaim;

My whole is a compliment

Frequently paid

To ladies of every grade;

Behold me and then it is

Offentimes said

I'm first of the kind ever made;

Curtail but this last, and then

Truly the name

Of a lady my letters convey;

Read backwards and forwards,

I'm each way the same;

Now tell me this riddle, I pray.

Answer next week

WHY is a sheet of postage stamps like distant relations? Because they are only slightly connected.

A Clever Surgeon



PETER PUFF: "Oh, Doctor, I've got a thorn in my hand, and I can't get it out, and it hurts dreadfully—boo, hoo!"

Dr. Brownie: "There, don't cry, my lad! I can extract it in a jiffy with my earwig tweezers!"

□ □ □

What Am I?

ACROSS my first with flash and roar

The stately vessel glides alone,

And mournful on the crowded shore

There stands an aged crone,

Watching my second's parting smile

As he bids farewell to his native isle.

My whole comes back to other eyes

With beautiful change of fruit

and flowers,

But dim to her are those bright skies,

And sad those joyous hours:

For alas! my first is dark and deep,

And my second cannot hear her weep.

Solution next week

□ □ □

WHAT is more foolish than sending

coals to Newcastle?

Sending milk to Cows.

□ □ □

Completing His Collection

A WELL-KNOWN French playwright, having lent three volumes to a friend, wrote for their return. No answer. A second letter, then a third, failed to bring the books.

Then the playwright took down from his shelves the remaining five volumes of the same set, carefully packed them up, and addressed them to his friend, with this note:

"My dear A, Excuse me. I have such a dislike for odd books that I pray you kindly to accept these; they will complete your collection."

□ □ □

ANSWERS TO LAST WEEK'S PUZZLES

What Am I? Tomorrow

Name and Address

Master Bob Page, 90, Cannon Street, Swansea.

Uncle Harry's Apples

There were 24 apples; Alf had 2, Bob 6, Tom 12, and Sid 4.

Jacko Goes In for a Competition

A PRIZE of £100! And simply for answering a few examination questions!

Jacko laid down the newspaper, searched in his pockets for the stump of a pencil, and then, opening an old exercise book, made a list of the things he would buy with the £100.

He had just written down "A wireless set" when the door opened and in came his father, dressed for the City.

"Before you decide how to spend the money," said his father, "you had better think how to answer the questions."

Jacko waited till he had gone, and then slipped down the stairs, put on his cap, and ran up the street to the Public Library.

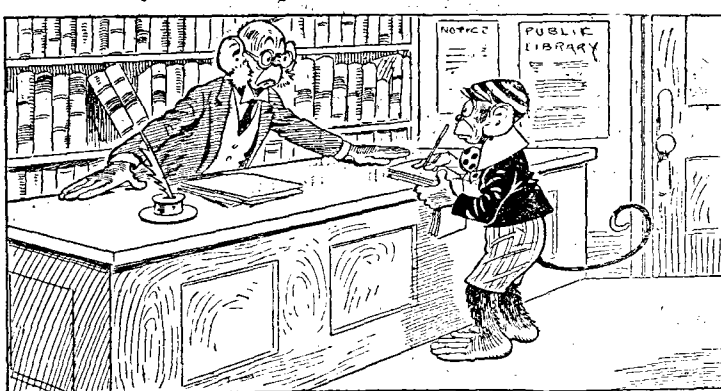
"Please," he said to the librarian, "you are tremendously clever, aren't you?"

"Occasionally," answered the librarian.

"Would you mind telling me," continued Jacko, producing the list of questions, "what is the capital of India?"

"Snitzo," answered the librarian. "It stands on the River Gumbo-Jumbo, which, being tidal, carries it down to the sea in the morning and brings it back at night covered with lobsters, crabs, jelly-fish, and antimacassars."

"Thank you," said Jacko, and wrote it down. Then he



"Thank you," said Jacko, and wrote it down

looked at the next question and asked, "Would you be so generous as to tell me what is the difference between an air wave and an ether wave?"

"Phlebotomy," replied the librarian.

"Thank you," said Jacko, and wrote down *Flea bottle*.

"Next?" asked the librarian.

"Who was it," asked Jacko, "who first discovered America?"

"Ebenezer Cuttlefish," answered the librarian.

"I've never heard of him!" exclaimed Jacko.

"Very few people have," replied the librarian; "but he was a good man with a large family and a troublesome habit of wearing his boots on his head."

"I'll put that in," said Jacko, and began to write.

The librarian quietly took a volume of an encyclopedia from the shelves, and, lifting it slowly in the air, deposited it with steady force on Jacko's head.

"Oh!" cried Jacko, and reeled from the counter with starting eyes and staggering feet.

"Don't thank me," said the librarian, putting back the volume on the shelf. "I am anxious for you to win the competition, and, as there is no chance of putting information into your mind, I thought I would do the next best thing and give you the bump of knowledge on the outside of your very silly skull."

"Are you a phrenologist?" asked Jacko, rubbing his head.

"The answer to that," replied the librarian, leaping over the counter with beautiful agility, "is Twinkle-twinkle, little winkle, have you got a pin?" And, lifting Jacko up and carrying him to the door, he added, "Allow me to conduct you to your Rolls-Royce."

There was a dustcart in the street. Jacko landed on a heap of salmon-tins.

Those Who Come and Those Who Go

How many people are born in your town and how many die? Here are the figures for four weeks in 12 towns.

TOWN	BIRTHS		DEATHS	
	1923	1922	1923	1922
London	7219	7499	3438	3206
Glasgow	2057	2157	980	872
Liverpool	1625	1799	681	655
Manchester	1237	1316	611	627
Dublin	808	833	409	466
Edinburgh	719	731	363	382
Hull	504	561	216	228
Cardiff	401	382	161	131
Southampton	250	259	108	92
Norwich	191	200	109	71
Coventry	177	202	85	88
Bath	81	81	46	51

The four weeks are up to July 28, 1923

Ici on Parle Français



La grille La tulipe Les ruines
Il n'y a pas de feu dans la grille
On cultive les tulipes en Hollande
J'aime à rêver parmi les ruines



La pensée Le banc Le palmier
La pensée fleurit au mois de juin
L'écolier est assis sur un banc
Ce palmier pousse au bord du Nil

Tales Before Bedtime

Minnows

ONE day Simon went fishing—not in his mother's pail to catch a whale, but in the stream to catch minnows.

He put three of these pretty little creatures into a glass jar, with plenty of water-weed at the top and a few ants' eggs, then he wrapped it up—all except the top—and addressed it to "Miss Daisy Thomson, With best wishes from Simon." Underneath this he wrote: "Glass—with care," and above it "Immediate," and in big letters on one side "Perishable."

Then he carried it carefully to a little house in a town street where there were more chimney-pots than trees, knocked loudly at the door, and handed in the parcel.

Daisy Thomson was a little girl who had legs not a bit like other people's legs. They couldn't walk, or even stand, and they hurt her so very much that she had to lie in bed all day with nothing to look at but a few old picture-books.

That was why she loved Simon's present; for watching the three little silver minnows darting in and out of the water was like having a new picture every minute.

She watched them for a week, and then she sent for Simon.

"Oh, Simon, I love them!" she said. "But I'm afraid they don't like living in a glass jar in this little room after their lovely stream."

"Well, they look jolly enough," said Simon.

"Yes—for a week, but soon they'll begin to fret and die. Do go and put them back in the stream, like a good boy, and catch me three new ones who won't mind a glasshouse just for one week."



Simon went fishing

Simon said it was all nonsense, but Daisy had her way, and the minnows went once more to enjoy life in the stream, and three more came to pay a week's visit to town.

And this went on for weeks and weeks, till Daisy's father said he believed all the minnows in the stream knew as much about life in the glass jar as they did about their own home.

So Simon went to a pond and caught a lovely stickleback, almost as handsome as a goldfish; and Daisy loves him so much she's really afraid his visit to town must last longer than a week.

Then and Now



At school in 1923



At school in 1923

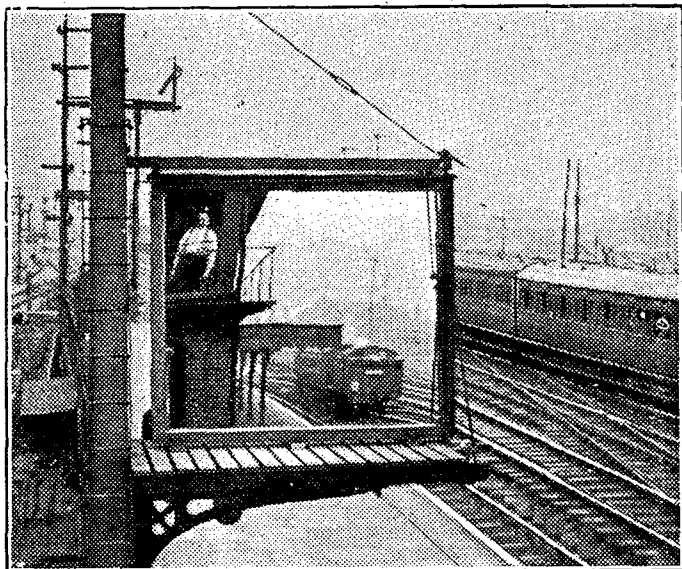
The Children's Newspaper grew out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world.

CHILDREN'S NEWSPAPER

August 25, 1923 Every Thursday, 2d.

The C.N. is posted anywhere inland and abroad for 11s. a year. My Magazine, published on the 15th of each month, is posted anywhere, excepting Canada, for 14s.; Canada, 13s. 6d. See below.

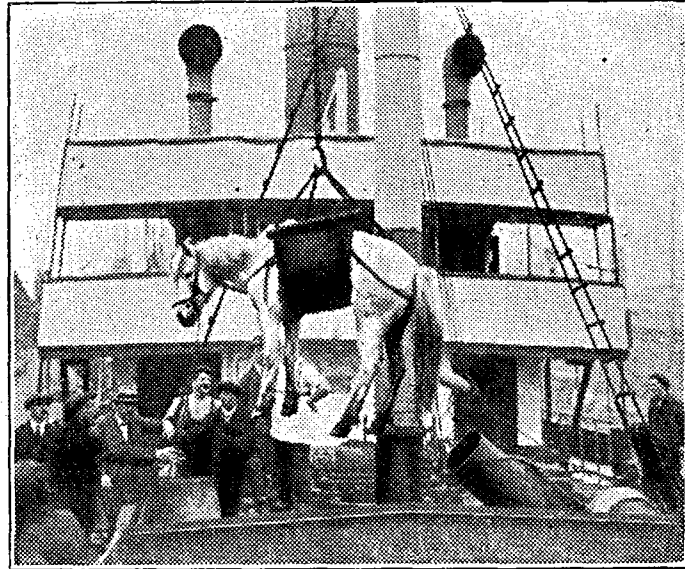
THE SIGNALMAN'S EYE · HOME IN A TOWER · POLO ON ROCKING HORSES



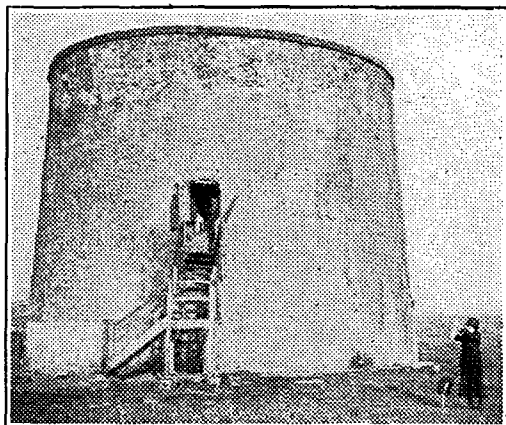
The Signalman's Eye—At Stratford, on the London & North Eastern Railway, this mirror has been erected near a signal-box so that the signalman can see trains coming round a corner which he could not see otherwise



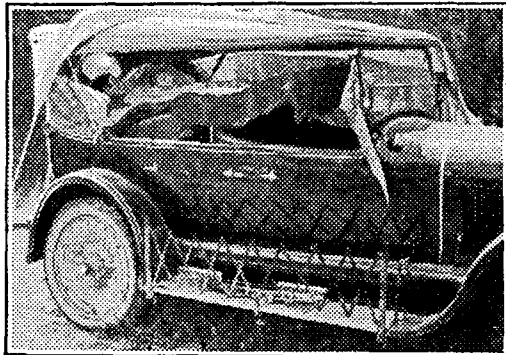
America's New President—Mr. Calvin Coolidge, who is now President of the United States



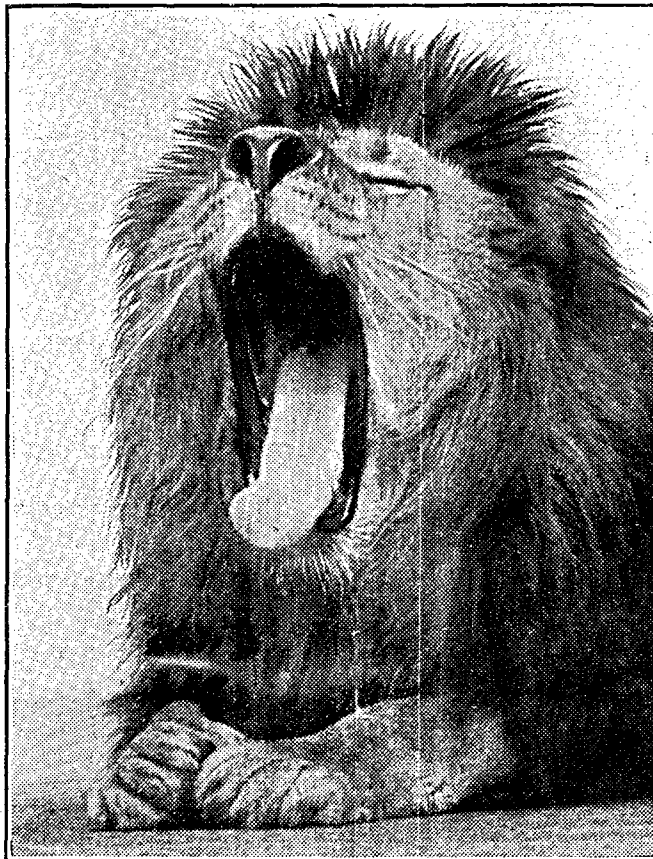
Iceland Ponies for the Pits—Several hundred Iceland ponies recently arrived at Hull for use in the coalpits of South Yorkshire, and here they are seen being landed at Hull. The ponies are wiry, and suited to pit work



A Home in a Tower—One of the Martello towers on the South Coast between Folkestone and Eastbourne, now used as a home owing to the great shortage of houses



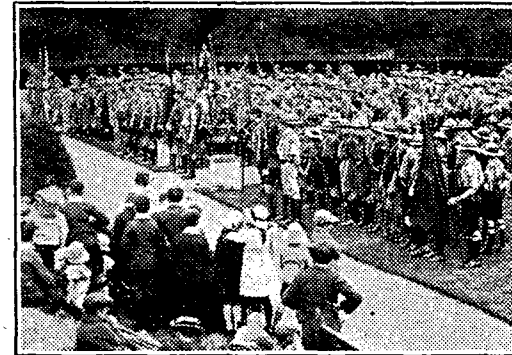
Motor-Car as a Bedroom—Many tourists in America now travel by motor-car, and at night, instead of going to hotels, they arrange the car for sleeping, as shown here



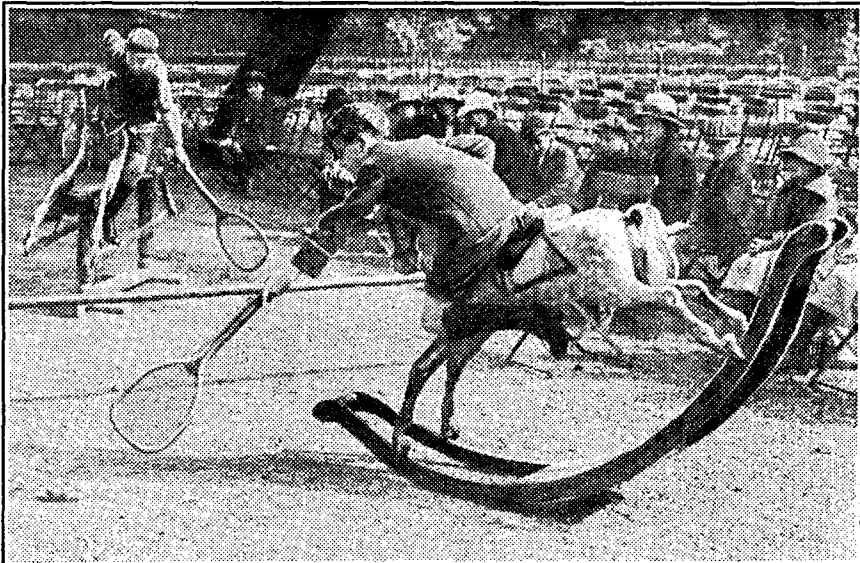
The King of Beasts Feels Bored—This lion at the Zoo seems to be very bored with life in London during the holiday season, and the photographer managed to snapshot him just as he was making a prolonged gape



The Telescope at Westminster—Boys and girls like looking at Big Ben through this telescope, which stands by Boadicea's statue on the Thames Embankment



Danish and Dutch Scouts in London—Danish and Dutch Boy Scouts during their holiday in England parading at Fools Cray, Lord Waring's seat at Sidcup, in Kent



Polo on Rocking Horses—Boys of the open-air school in Regent's Park, London, playing the new game of tenipolo, which they have invented. It is a cross between tennis and polo



Foundling Hospital Goes to Camp—Children of the famous Foundling Hospital, London, have been enjoying a camp holiday near Worthing, and are here entering the tents for dinner

ALL THE WORLD LOVES THE C.N. MONTHLY. ASK FOR MY MAGAZINE. EDITED BY ARTHUR MEE

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